2014

The Bridge Drawing with Path Art-Based Assessment: Measuring Meaningful Life Pathways in Higher Education Students

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The Bridge Drawing with Path Art-Based Assessment: Measuring Meaningful Life Pathways in Higher Education Students

A DISSERTATION
submitted by

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In partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

LESLEY UNIVERSITY
May 2014

Lesley University
Graduate School of Arts & Social Sciences
Ph.D. in Expressive Therapies Program

DISSERTATION APPROVAL FORM

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Approvals

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ACKNOWLEDEMENTS

I did not walk along this academic path alone. Significant people walked with me. Now that I have reached the endpoint of this path, I would like to thank those remarkable individuals who supported, encouraged and assisted me throughout this journey.

Firstly, I want to thank my loving husband Romko for all the midnight technical support sessions and for cradling me during my fragile moments. A big thank-you goes out to my children Lukash and Kalyna for reminding me to smile and laugh during tumultuous times. I would also like to thank my parents, sister and in-laws for all their emotional and financial support – Diakuyu! (in Ukrainian).

I am profoundly thankful to my research assistants - Gilda Raimondi, Gillian Vellet and Daniel Hyams and statistician - Anton Svendrovski for their time and dedication to this study.

A special thanks to Australian art therapist Jill Westwood, Canadian art therapist Helene Burt and dear friend Taras Gula for guiding me towards study participants. Esther Zeller Cooper, you are my cheerleader. You always cheer for me on the sidelines and assist with last minute frenzy tasks!

I am grateful to the higher education students studying in Britain and Canada who participated in this dissertation study. I wish them all the best in achieving their personal life goals and life meaning.

To Lesley expressive therapies PhD cohort four members, it was a pleasure meeting you all. I want to thank all of you for sharing your research and clinical experiences with me. I hope our life paths cross again in the future.

And lastly, I want to thank my dissertation committee members – Robyn Cruz for her continuous presence and red track changes, Judy Rubin for always believing in me and Julia Byers for sharing her wisdom and energy with me.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ILLUSTRATIONS

Figure

ABSTRACT

This cross-sectional study investigated the relationships among the Bridge Drawing with Path (BDP) art-based assessment and two positive psychology instruments: the Meaning in Life Questionnaire (MLQ; Steger et al., 2006) and the Adult State Hope Scale (ASHS; Snyder et al., 1996). All three assessments (BDP, MLQ and ASHS) are intended to test for an individual's goal-related pursuits. Forty-four higher education students studying in Britain and Canada participated in the study. Results indicated that an association exists between BDP written associations and MLQ-presence of meaning sub-scores. Participants who scored high on MLQ – presence of meaning generated more sources of life meaning paths in their BDP images leading to home, relationships, careers, education and spirituality than participants who scored low on MLQ - presence of meaning. Based on the results of the study, the BDP best complements the MLQ. In the clinical setting, the two measures can be introduced at intake to gather client presence of life meaning, sources of life meaning and goal-directed information and could be re-administered at termination in order to assess therapeutic outcomes. The study was the first step in the development of an adult database for the BDP art-based assessment. The study's collective theoretical framework fortifies the connection between art therapy, meaning therapy (Wong, 2010) and positive psychology. The study launched a pencil-and-paper BDP Manual to be used by future mental health professionals such as art therapists, meaning therapists and positive psychologists. Future joint BDP-MLQ studies may explore older adults' end-of-life meaning and paths from life to the unknown.

Keywords: art-based assessments, art therapy, bridge drawing with path, higher education students, hope, inter-rater agreement, meaning

CHAPTER 1

Introduction

Problem Statement

In the field of art therapy, the Bridge Drawing (BD; Hays & Lyons, 1981) is a projective drawing assessment in which individuals generate an image which is thought to reflect their perception of their past, present and future life. Hays and Lyons originally administered the BD to 150 American students between the ages of 14 and 18 in order to understand how normal American adolescents undergoing developmental changes would complete the assessment. The instructions ask the person to "Draw a bridge from someplace to someplace," (Hays & Lyons, 1981, p.208). The resulting drawing is assumed to display elements of an individual's perception of life movement, transition, conflicts and barriers (Councill, 2003; Hays & Lyons, 1981; Heo & Jue, 2010; Teneycke, Hoshino & Sharpe, 2009; Stepney, 2001). Hays and Lyons identified 12 formal BD image variables but did not create a rating scale for the image variables.

In a recent art therapy pilot study (Darewych, 2013), the BD assessment was chosen for use with institutionalized orphans in Ukraine who were isolated from society and without a secure parental attachment. The author's orientation was based on the work of Victor Frankl (2006). Frankl, who invented "logotherapy" was a Nazi concentration camp survivor who asserted that even individuals in severely limited settings separated from society have the ability to find meaning in life and hope for a better future. The researcher used the BD to attempt to understand if institutionalized orphans had the ability to envision and draw their future life, goals and hopes.

Because the primary interest of that pilot study was in the orphans' intrinsic capacity to envision their future life, the BD directive was modified by including a path to encourage a

psychological shift to the future. The new directive stated, “Draw a bridge from someplace to someplace. The bridge connects to a path. Draw the path and write where it leads you to,” (Darewych, 2013, p. 87). This new conceptualization of the BD was named the Bridge Drawing with Path (BDP), and it also added an emphasis on written associations to the path. Groth-Marnat (1997) recommended that administrators of projective drawing assessments include an “inquiry stage” by requesting individuals to tell a story about their image. The inquiry component in the original BD was optional "If you wish, you may describe your picture in words" (Hays & Lyons, 1981, p. 208). Subsequent BD researchers as well suggested that individuals tell a story about their BD verbally or in writing (Campbell, 2012, Nuncho, 1990; Teneycke, et al., 2009). To date, no BD studies have analytically determined if BD written associations could be related to specific psychological constructs. Because the BDP represented a new assessment it was decided to include Groth-Marnat’s and previous BD researchers’ suggestions and direct BDP participants to write about the image they created; specifically where their path was leading.

Historically, projective drawing assessment developers, who were usually psychologists, often directed individuals to complete the drawing on a single white 8.5 x 11 - inch paper with a sharp No. 2 pencil (Groth-Marnat, 1997). However, in recent years, art therapists have been directing study participants to complete BD drawings with chromatic materials such as crayons, colored pencils, pastels or felt-tip markers on a larger white 12 x 18 - inch paper (Campbell, 2012; Nucho, 1990; Teneycke, et al., 2009) and have been designing rating scales for BD chromatic drawings based on the Formal Elements Art Therapy Scale (FEATS; Gantt & Tabone, 1998). Teneycke and her research team (2009) and Martin and Betts (2012) designed separate BD rating scales based on the chromatic FEATS.

Based on the researchers' clinical and research experience, it was thought that chromatic materials may entice individuals to integrate multiple colors and shadings in their drawings which may conceal specific image details and patterns. Thus, in this study, to enhance rating and understanding of the images, the BDP was designed to use a single white 8.5 x 11 - inch paper with a sharp No. 2 pencil, and a rating scale based in part on the original formal BD image variables by Hays and Lyons (1981) was devised.

In the BDP pilot study (Darewych, 2013) 258 orphans from 32 Ukrainian orphanages between the ages of 8 and 20 completed the BDP. In addition to other results, the modified assessment showed that the psychological and image shift intended by the new directive resulted in participants placing emphasis on their life paths, goals, sources of meaning in life and stories rather than the bridge. The orphans' paths led to "home," "future," "friends," "education," "careers," and to a "better life". In addition, explicitly requesting each participant to directly write on the paper the story or meaning attached to the drawing divulged further ideas stimulated by the drawing. The written associations attached to the BDP paths extended and articulated the participant's goals, orientations, hopes and sources of meaning in life (i.e., home, family, friends, careers and education).

Rationale of the Study

The BDP pilot study caused some questions to be raised about the potential of the BDP with adults. For example, would adults have the same responses as orphans to depict life pathways, goals, orientations, hopes and sources of meaning in life (i.e., home, family, friends, career, education, spirituality)? Based on the written association pilot study results, might adults' BDP image directionality and written associations be associated with other measures of hope and meaning in life?

Consequently, the current cross-sectional study was devised to address these questions using students 18 years and older enrolled in art therapy and art-psychology courses as participants. Based on a literature review, the Adult State Hope Scale (ASHS; Snyder, Sympson, Ybasco, Borders, Babyak, & Higgins, 1996), and the Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi, & Kaler, 2006) were chosen as measures for comparison with the BDP due to their content, brevity and ease of administration. All instruments were administered to higher education students studying in Britain (N = 25) and Canada (N = 19). Finally, rating data from the BDP pilot study were used to refine the current BDP rating system and Damon's (2009) and his colleague's sources of life meaning taxonomy was used to rate written associations.

Research Question

The primary research question for the study was: Whether a psychometric association exists between the BDP scores; specifically written associations and right-future image directionality and scores on the ASHS (Snyder et al., 1996) and the MLQ (Steger et al., 2006). All three assessments (BDP, ASHS and MLQ) are theorized to measure an individual's goal-related pursuits.

Theoretical Frameworks

Due to all three measures' goal-related orientation, the study was grounded in the following five meaning in life theoretical frameworks. The first is Victor Frankl's logotherapy (2006). Frankl's theory stated that there are three ways that an individual can find meaning in life: through (1) creating something for the world, (2) establishing relationships with others and (3) choosing a brave attitude during moments of suffering. The second theoretical framework is Paul T. P Wong's (2010) Meaning Therapy (MT), an expansion of Frankl's logotherapy that provides clients experiencing psychological difficulties tools to find life meaning and to move

towards positive future goals. The third theory is Damon's (2009) sources of life meaning taxonomy and amplified by other sources of meaning in life theories and studies from the field of psychology (Bar-tur, Savaya & Prager, 2001; Debats, 1999; Devogler, 1981; Emmons, 2003; Wong 1998/2012a). The fourth theory is from the field of positive psychology (Seligman & Csikszentmihalyi, 2000) which places greater emphasis on clients' post-traumatic growth than their life crisis and helps them find pathways towards a meaningful life. The fifth theory was drawn from the field of art therapy; specifically Bruce Moon's (2009) existential art therapy and Pat Allen's (2005) theory of art as a path to meaning. Though immense and intriguing, meaning in life theories from the field of philosophy were not deeply explored in this study.

Contributions to the Field of Art Therapy

This study is intended to add to the body of knowledge of art-based assessments in the field of art therapy. This art therapy study is unique because it attempts to systematically determine if written associations attached to the BDP are related to the constructs of meaning and hope. Second, the study initiates the development of an adult database for the BDP art-based assessment for future quantitative and qualitative BDP research. Third, this study expands the historical roots of the BD art-based assessment. Fourth, the study unveils a pencil-and-paper BDP Manual to be used by future mental health professionals such as art therapists, meaning therapists, psychiatrists, psychologists and social workers.

CHAPTER 2

Literature Review

The following literature review examines (1) meaning in life, (2) hope as an element of meaning, (3) sources of meaning in life (4) meaning in life in current societal context, (5) logotherapy, (6) meaning therapy, (7) the union of art therapy and meaning therapy, (8) logoart, (9) the union of art therapy and positive psychology, (10) art-based assessments in art therapy, (11) bridge drawing art-based assessment and its history, (12) bridge drawing with path art-based assessment, and (13) summary.

Meaning in Life

Humans at multiple junctures along their life path search for meaning. Finding meaning in life is a basic human need that brings individuals psychological stability in our confusing world (Baumeister &Vohs, 2010; Frankl, 1978; Hoffman, 2009; Remen, 2001; Klinger, 1998). Meaning in life can be conceptualized as consisting of four basic needs: purpose, efficacy or control, value and justification, and self-worth (Baumeister, 1991). Austrian psychiatrist and logotherapist Victor Frankl (2006) asserted that for humans the ultimate purpose in life is to find meaning and that meaning arises when individuals develop a clear vision of their present and future life. Frankl further explained that individuals who fail to achieve meaning in life succumb to an "existential vacuum"; a space filled with inner emptiness, boredom and emotional crisis. Emmons (2003) underscored that when an individual is asked "what makes for a happy, fulfilling, and meaningful life, people spontaneously discuss their life goals, wishes, and dreams for the future" (p.106). Emmons further stated that "Goals are the concretized expression of future orientation and life purpose, and provide a convenient and powerful metric for examining these vital elements of a positive life" (p.106). Social psychologists Fishbach and Ferguson

(2007) defined a goal "as a cognitive representation of a desired endpoint that impacts evaluations, emotions and behaviors" (p.491).

Despite the abstraction and complexity of the construct of meaning, contemporary psychologists have begun theoretically and empirically investigating meaning (Baumeister &Vohs, 2010; Debats, 1999, Steger, Frazier, Oishi & Kaler, 2006; Wong, 2010). Most recently, Russian psychologist Dmitry Leontiev exclaimed "I dare to state that the concept of meaning seems to be more relevant for the psychology of the twenty-first century, where it has a chance, in my humble opinion, to become a central one" (p.457). American psychologist Michael Steger (2012) defined meaning as:

> the web of connections, understandings, and interpretations that help us comprehend our experience and formulate plans directing energies to the achievement of our desired future. Meaning provides us with the sense that our lives matter, that they make sense, and that they are more than the sum of our seconds, days, and years. (p. 165)

Individuals gain life meaning by actively engaging with family and friends, by participating in community organizations, by accomplishing worthy academic or career undertakings and by generating valuable contributions to society (Baumeister &Vohs, 2010; Butler, 2010; Damon, 2009; Seligman, 2011).

Since 1998, several self-report measures have been developed by psychologists to measure the meaning construct. Wong (1998a) developed the Personal Meaning Profile (PMP), a 57-item instrument measuring an individual's perceptions of personal life meaning. Mascaro and his colleagues (2004) developed the 14-item Spiritual Meaning Scale (SMS) and defined spiritual meaning as "the extent to which an individual believes that life or some force of which life is a function has a purpose, will, or way in which individuals participate" (Mascaro, Rosen &

Morey, 2004, p.847). Schnell (2009) designed the 14-item Sources of Meaning and Meaning in Life (SoMe) questionnaire. Steger et al. (2006) created a brief 10-item Meaning in Life (MLQ) questionnaire measuring the presence and search for meaning in individuals. And in 2009, Morgan and Farsides (2009) developed the Meaningful Life Measure (MLM) which specifically measures the purpose dimension of meaning.

Studies investigating the meaning construct have found that individuals who establish a sense of life meaning tend to be cognitively and physically healthier and happier (Peterson & Seligman, 2003; Ryff & Singer, 1998). Individuals with higher levels of meaning report more future pathways (Steger, Kashdan, Sulliven, & Lorentz, 2008), higher levels of hope (Mascaro & Rosen, 2005; Steger et al., 2006), less negative affect (Chamberlain & Zika, 1988), lower levels of depression, (Debats, Lubbe & Wezemann, 1993; Mascaro & Rosen, 2006; Stegar et al., 2006) lower levels of anxiety (Debats et al., 1993, Mascaro & Rosen, 2006) and less need for therapy (Battista & Almond, 1973). Additional studies have found that a strong relation exists between meaning in life and spirituality (Steger & Frazier, 2005; Wong, 1998b). Emmons (2003) asserted that current scientific studies exploring spirituality will provide greater understanding of meaning and goal-directions. Other studies have found that a relationship exists between an individual's life meaning and well-being (Ryff, 1989, Peterson, 2006). Feldman and Snyder (2005) as well emphasized that a strong relation exists between meaning and hope (Feldman & Snyder, 2005).

Hope as an Element of Meaning

A recent study concluded that hope can be theorized as an element of meaning (Michael & Snyder, 2005). Meaning is a source for life goals while hope is a goal-directed thought process (Snyder, 1994). Specifically, hope is defined as a "cognitive set that is based on a reciprocally

derived sense of successful (a) agency (goal directed determination) and (b) pathways (planning of ways to meet goals)" (Snyder, Harris, Anderson, Holleran, Irving, Sigmon, Yoshinobu, Gibb, Langelle, & Harney, 1991, p.571). Thus, for an individual to cognitively move towards their life goals, agency and pathways thoughts are necessary.

Hope can be viewed as a character trait as well as a present state of mind. Snyder and his colleagues (1991) developed and validated the eight-item Hope Scale. The self-report instrument measures an adults' level of dispositional hope. A few years later, Snyder et al. (2006) designed the Adult State Hope Scale (ASHS) measuring adults' level of state hope.

Multiple studies have shown that high hope individuals have greater optimism, positive affect, problem-solving skills, self-esteem and positive goal expectancies and lower symptoms of anxiety, negative affect and depression compared to low hope individuals (Snyder, 1994; Snyder, LaPointe, Crowson & Early, 1998). Further hope studies have found that high hope college students attain greater academic achievement (Snyder, Shorey, Cheavens, Pulvers, Adams, & Wiklund, 2002) and that high hope college students report greater energy and confident levels revolving around life and academic goals (Snyder et al., 1991). To date, hope studies have shown no differences in hope levels between young men and women. Yalom (1995) described the instillation of hope as crucial to any therapy.

Sources of Meaning in Life

According to Schnell (2010), "Sources of meaning represent generalized and relatively stable orientations towards life ... sources of meaning motivate commitment, give direction to life, and increase its significance" (pp. 353–354). A recent survey study conducted by Damon and his colleague (2009) found that the following sources, in descending order, provide young people with meaning in their lives:

1. Family
2. Career
3. Academic achievement
4. Religious faith or spirituality
5. Sports
6. Arts
7. Community service
8. Political/societal issues. (p. 53)

Emmons (2003) in his study identified the following four sources of meaning: work/achievement, intimacy/relationships, spirituality and self-transcendence/generativity. Bar-tur, Savaya & Prager (2001) in their sources of life meaning study with 362 young and older Arab and Jewish adults found the following seven sources of meaning in life: family, materialistic concerns, autonomy, interpersonal relationships, communal activity, attainment of tranquility and self-development. Wong's (1998, 2012a) meaning in life study identified the following seven sources of meaning: happiness, achievement, intimacy, relationship, self-transcendence, self-acceptance and fairness. Ebersole and Devogler (1981) in their research identified the following common sources of life meaning: relationships, religious beliefs, health, pleasure and personal growth. Debats (1999) in his study with patient and non-patient young adults, classified eight relevant sources of meaning. The top four sources were: relationships (family and friends), lifework, personal well-being and self-actualization. Debats confirmed his study's first hypothesis that the category of relationships was the most frequent source of life meaning for both patient and non-patient participants. Debats as well, distinguished "future/hope" as an important source of life meaning for young adults.

All the above studies used self-report questionnaires to assess participants' sources of meaning in life. Most recently, positive psychologist Steger and his research team (2013) conducted a pilot study exploring photography as a "new method" of measuring sources of meaning in life. Two photography methods were utilized in the study design; auto-photography and photo-elicitation. The auto-photography research method invites participants to take photos of important people, places and things within their environment, while the photo-elicitation method prompts verbal responses from participants during the study interview (Steger, Shim, Rush, Brueske, Shin & Merriman, 2013). Eighty-six participants from an undergraduate introductory psychology course at an American university participated in the study. Participants were given a Kodak digital camera and directed to "take photos of the things that make your life feel meaningful" (Steger et al., 2013, p.534). After the photo process, participants attended an interview where they were instructed to write a description for each photograph and to highlight why each photo was meaningful to them. The written category analysis results identified the following 16 sources of meaning: nature, hobby/leisure, relationships, pets, possessions, everyday necessities, religion, values, education, technology, organizations/activities, physical environment, future aspirations, occupation/work, self and miscellaneous. Several of the categories corresponded with previous verbal self-report sources of meaning investigations (Bar-tur et al., 2001; Damon, 1999; Debats, 1999; Emmons, 2003). Furthermore, Steger and his team underscored that the verbal descriptions from the photographic method presented greater sources of meaning categories and sub-categories. Though photography may be a "new method" in psychology research, it has been a longstanding clinical intervention in art therapy sessions for clients to explore life meaning (Akeret, 1973; Weiser, 1993).

Thus, numerous sources of life meaning theories and studies (Bar-tur et al., 2001; Damon, 1999; Debats, 1999; Devogler, 1981; Emmons, 2003; Wong 1998/2012a) support Frankl's (2006) theory that relationships and spirituality are primary pathways for individuals in today's society to find meaning in life.

Meaning in Life in Current Societal Context

Living a meaningful life in our current hectic world is a challenge; especially for youth and young adults (Damon, 2009; Hoffmann, 2009). William Damon (2009), leading scholar of human development exclaimed that a number of today's youth and young adults living in industrial nations such as Britain, Japan and the United States, lack life meaning and are suffering from "directionless drift" and "developmental paralysis". Regrettably, higher education institutions generally guide young students towards short-term goals rather than rewarding and meaningful long-term future life paths (Damon, 2009). Tetley (2010) underscored the importance of higher education institutions providing internal programs designed for their students to find meaningful academic and career pathways. Damon also found that young people come to therapy complaining of feeling stuck along their life path. Interestingly, American business psychologists Timothy Butler (2010) clarified that "Being at impasse is a developmental necessity. It can lead to a new way of understanding and a new type of information" (p.2). Butler further explained that individuals remain developmentally stuck until they gain momentum towards new life pathways. Thus, life meaning ought to be a fundamental outcome variable for therapeutic interventions in all faculties of psychotherapy (Frankl, 2006; Gelso & Woodhouse, 2003; Steger, 2012; Wong, 2012b). Logotherapy is one school of psychotherapy which provides clients who are feeling stuck or undergoing an emotional life

crisis, a safe environment to reflect upon their life, explore life meaning, visualize future life pathways and become aware of the sources in their lives which provide meaning.

Logotherapy

Logotherapy is a form of existential psychotherapy which was developed by psychiatrist Victor Frankl (2006). Logotherapy is a therapeutic process through which an individual discovers life meaning. Logos is a Greek word translated as meaning. Frankl in his book *Man's Search for Meaning* stated that there are three pathways through which an individual can find meaning in life: (1) through the act of creating something for the world, (2) establishing relationships with others and (3) choosing a brave attitude during moments of suffering. Regarding the latter, Frankl affirmed that even during life crisis and suffering "everything can be taken away from a person but one thing: the last of the human freedoms – to choose one's attitude in any given set of circumstances, to choose one's own way" (p.66). He further stressed that "it is a peculiarity of man that he can only live by looking to the future …and this is his salvation in the most difficult moments of his existence, although he sometimes has to force his mind to the task" (p. 73). Frankl believed that spirituality should be a keystone for psychotherapy. Thus, logotherapy treatment focuses on the future and helps clients taper their existential vacuum and become aware of internal and external sources for personal growth and life meaning. Wong (2012b) underscored that "logotherapy offers several logotherapeutic techniques to psychological problems related to the existential vacuum, it was not designed to provide a comprehensive and coherent framework of counseling or psychotherapy incorporating a wide range of skills and tools" (p. 626). Logotherapist Jim Lantz (1993) recommended that logotherapists utilize art as a tool in logotherapy for art is a pathway to an individuals' unconscious and allows clients to gain awareness of life meaning and spirituality. Lantz

presented four "ways" of integrating art in logotherapy. The first is to allow clients to observe their artwork in order to become aware of life meanings and spiritual potentials repressed and therefore at an unconscious level. The second is to allow clients to create art as a way of reflecting and informing the logotherapist their personal life meanings and spirituality. The third is for the therapist to create art around their client's therapeutic process and then to provide the artwork to the client as a way of informing the client about the therapist's understanding of the client's life. The fourth way is for the logotherapist to create art in order to manage countertransference issues arising during therapy sessions. The logotherapist does not share the artwork around countertransference issues with the client. Recently, clinical psychologist Wong (2010, 2012b) constructed meaning therapy. Meaning therapy is an expansion of logotherapy which introduces new therapeutic constructs, skills and tools.

Meaning Therapy

According to clinical psychologist Paul T. P Wong (2010), meaning therapy (MT), also known as meaning-centered counselling and therapy (MCCT), originated from logotherapy and is a positive existential approach to psychotherapy which provides clients overwhelmed by psychological difficulties with tools to find life meaning and move towards positive future goals. Meaning therapy is not a new school of psychotherapy but a contemporary framework which focuses on meaning. Wong asserted that meaning therapy is integrative, existential, relational, positively oriented, multicultural, narrative and psycho educational. Wong's PURE model operationally defines meaning as comprising of four-parts: purpose, understanding, responsible action and enjoyment. Wong as well designed an ABCDE intervention strategy meant to be applied by meaning therapists to promote change in clients experiencing a life crisis. In Wong's ABCDE strategy, A stands for Acceptance, B for Belief and affirmation, C for Commitment to

action and goals, D for Discovering new meaning and E for Evaluation of positive outcomes. Wong emphasized that in order for a client to undergo change he or she must first accept the crisis and then be hopeful, commit to positive change, discover and partake in meaningful actions and finally evaluate positive life goals. Wong as well presented the double-vision strategy, a two-pronged therapeutic approach aimed at addressing both the clients presenting problems as well as the "big picture" concerns, primarily the meaning in life. Regarding the double-vision strategy, Wong exclaimed "If we focus on the trees, we may lose sight of the forest. We can gain deeper insight into our clients' predicaments by looking at the bigger picture (Wong, 2012b, p.642). The essential tools used in meaning therapy for clients to envision their positive life goals include "mindful meditation, dream work, expressive therapy, magic questions, journaling, self-reflection…" (Wong, 2010, p. 92). Art therapy is one expressive therapy modality which utilizes art making in the therapeutic setting to enhance the cognitive, emotional, physical, and social well-being of individuals of all ages who experience or have experienced personal illness or trauma and are in search of personal growth and life meaning (American Art Therapy Association, 2011). Brazilian born art therapist da Silva Prado (2006) recently integrated art therapy with logotherapy and later with meaning therapy.

The Union of Art Therapy and Meaning Therapy

Marianne da Silva Prado (2006) initiated "LogoArt", a therapeutic method combining art therapy and logotherapy. In Logoart, "the human being is pulled toward a goal, which invites him to seek for something valuable, something which is worth living and fighting for…It's as if having a purpose, a meaningful goal, imbues a person with strength to act" (da Silva Prado, 2005, p. 33). Several art therapists have written that clients can make their own lives more meaningful through art-making (Moon, 2009; Rubin, 1999; Spaniol. 2012, Wadeson, 2010). It is

the act of creating that reduces a client's existential emptiness and supplies their life with meaning (Frankl, 1986). Furthermore, art therapist Pat Allen deemed art "is a path to meaning" (Allen, 2005, p. 1). And art therapist Bruce Moon (2009) reminded art therapists that they "cannot fill the existential emptiness for their clients or hand out meaning in their lives. Only the individuals themselves can discover and create meanings…" (p.64). Marianne da Silva Prado has now transformed Logoart into Logoart-Meaning-Centered Art Therapy (MCAT) by merging art therapy with Wong's (2010) meaning-centered therapy. While Prado has been integrating meaning therapy with art therapy in South America and Europe, art therapists in North America have been integrating art therapy with positive psychology.

The Union of Art Therapy and Positive Psychology

The newly named field of "positive psychology" focusses on people's strengths, growth, pursuit of happiness and well-being rather than on their weaknesses and psychological difficulties (Seligman and Csikszentmihalyi, 2000; Snyder & McCullough, 2000). In the clinical setting this approach does not ignore clients' psychological or physical crises but places greater emphasis on clients' post-traumatic growth and helps them find pathways towards a meaningful life. Though a young branch, its roots are in classic theories such as Frankl's (1986) logotherapy, Rogers' (1951) client-centered therapy and Maslow's (1970) self-actualization and creativity ideas. This contemporary field continues to grow. Research in the field has centered on such constructs as flourishing, happiness and well-being. The construct of life meaning has received less attention in positive psychology. In the past decade, a number of North American art therapists have incorporated positive psychology theories and philosophies in their clinical practices and research (Betts, 2012; Chilton, 2013; Chilton & Wilkinson, 2009; Lambert & Ranger, 2009; Lee, 2013; Malchiodi, 2006; Puig, Lee, Goodwin, & Sherrard, 2006, Wilkinson &

Chilton, 2013). Most recently, Chilton and Wilkinson (2009) introduced the term "Positive Art Therapy" and invited art therapists to partake in a positive art therapy movement by integrating positive psychology into the field of art therapy. In their viewpoint, they challenged art therapists to develop and conduct research utilizing art-based interventions with elements of positive psychology. Recently, Rose, Elkis-Abuhoff and Goldblatt (2012) examined the psychometric relation between Dispositional Hope Scale (DHS; Snyder et al, 1991) which measures the positive hope construct and the art-based assessment Draw a Person in the Rain (DAPR). Art therapists Alfonso and Byers (2012) examined the hope construct in their disaster relief work in the Philippines. Additionally, Chilton and Wilkinson affirmed that in return, art therapy with its inimitable art-based instruments can contribute to the emerging field of positive psychology as well. Currently, a number of positive psychologists recommend that individuals use images and photographic art as tools to build upon their character strengths and to achieve life meaning (Fredickson, 2009, Kurtz & Lyubomirsky, 2013; O'Hanlon, 2012; Steger et al., 2013). Moreover, positive psychologist Mihaly Csikszentmihalyi (1996) proclaimed "Creativity is a central source of meaning in our lives" (p. 1). Methodologies in the study of life meaning however, have been limited to self-report questionnaires, interviews and writing samples (Steger et al., 2006). Art-based assessments may also be used as methods for investigating the meaning construct in art therapy, meaning-therapy and positive psychology research.

Art-based Assessments in Art Therapy

In the last half century, a number of art therapists have designed and implemented art-based assessments in their research and clinical settings. Art-based assessments are indirect measures which are theorized to reveal symbolically a client's personality, level of cognitive functioning, problems and character strengths (Betts, 2005; Brooke, 2004; Feder & Feder, 1998;

Kapitan, 2010). Since the drawing process is indirect, a client "may not be aware of all that he or she is revealing and is therefore less likely to fake or censor" (Cruz & Feder, 2013, p.162). Canadian psychologist Sophia Kahill (1984) stressed that a projective drawing is "a rich and potentially valuable clinical tool that can provide working hypotheses and a springboard for discussion with the patient" (p. 288).

Throughout the years, art-based assessments have been analyzed by using manual rating systems. However, with the inception of information technology (IT), a handful of art therapists have recently commenced analyzing projective drawings with computer rating systems (Kim, Bae, & Lee, 2007; Mattson, 2010/2012).

Some of the best known art-based assessments utilized in the field of art therapy are: Draw a Person Picking an Apple from a Tree (PPAT; Gantt & Tabone, 1998), the Diagnostic Drawing Series (DDS; Cohen, 1986), the House-Tree-Person (H-T-P; Buck, 1948), the Kinetic Family Drawing (KFD; Burns & Kaufman, 1972), the Bird's Nest Drawing (Kaiser, 1996) and the Bridge Drawing (BD: Hays & Lyons, 1981).

The Bridge Drawing (BD) Art-based Assessment and its History

In the field of art therapy, the Bridge Drawing (BD; Hays & Lyons, 1981) is an art-based assessment in which individuals generate an image thought to reflect their perception of their past, present and future life. In the BD, the bridge is used as a metaphor for transition from one space or mental state of consciousness to another (Chetwynd, 1982; Cooper, 1978; Fontana, 1994; Hays & Lyons, 1981; Jung, 1964). The bridge is "a symbol of transition, particularly from life to death, or from the secular to the divine, the bridge can also represent danger on the path of psychological or spiritual development" (Fontana, 1994, p. 77). Alternatively, the bridge can also lead to a better setting (Hays & Lyons, 1981) and may represent a connection between two

individuals (Hanes, 1997) or two separate worlds (Cirlot, 1996). Jung (1964), founder of analytic psychology, referred to bridges crossing over a river as symbolic images for change. In the BD, the image segment depicting the bridge may also represent the liminal space or "existential vacuum" (Frankl, 2006) within the creator's earthly journey, overwhelmed by feelings of emptiness and being stuck; neither here nor there. Art therapist Bruce Moon (2009) affirmed that "Metaphors guide seekers to explore themselves and use imagination to create solutions that give their life meaning" (p. 18).

Hays and Lyons originally administered the BD to 150 American students between the ages of 14 and 18 in order to understand how normal American adolescents undergoing developmental changes would complete the assessment. The art therapists defined normal adolescence as the "absence of serious emotional pathology, intellectual deficit or personality malformations that would exclude the subject from a regular high school classroom" (Hays & Lyons, 1981, p.208). The BD instructions ask someone to "Draw a bridge from someplace to someplace," (Hays & Lyons, 1981, p.208). The resulting drawing is assumed to display elements of an individual's perception of life movement, transition, conflicts and barriers (Councill, 2003; Hays & Lyons, 1981; Heo & Jue, 2010; Teneycke, Hoshino & Sharpe, 2009; Stepney, 2001). Due to its transitional nature, the directive seems best suited for adolescents and adults. Hays and Lyons identified 12 formal BD image variables useful for examining BD's: (1) directionality, (2) placement of self in picture, (3) places drawn on either side of bridge, (4) solidarity of bridge attachments, (5) emphasis by elaboration, (6) bridge construction, (7) type of bridge depicted, (8) matter down under the bridge, (9) vantage point of the viewer, (10) axis of the paper, (11) consistency of gestalt, and (12) written associations to drawings. The image variables can provide insight into the creator's direction of travel; future or past movement or no movement at

all. Though Hays and Lyons presented 12 formal BD image variables, they did not create a BD rating scale. In the study, 75% of the participants drew left to right directional images, 60% of the females drew arched bridges, water was the most prevalent matter under the bridge, eye level was most common vantage point, and 84% drew a horizontal axis image (Hays & Lyons, 1981). The art therapists concluded:

> Directionality helped the patient and therapist to focus on the patient's movement in therapy…The attachments of the bridge to the respective someplace proved to be indicative of the patient's attachment to the past or hoped-for attachment to the future…An insecure attachment indicated hopelessness in crossing the matter. (Hays & Lyons, 1981, p. 213)

Furthermore, Hays and Lyons emphasized that the BD may assess for client suicidal ideation. Assessment for suicide thoughts and intent can be made if a client draws themselves standing in the middle of the bridge looking down.

A decade later, Aino Nucho (1990) in the United States administered the BD to three distinct groups. Nucho explored participants "goal-directed behavior, mood, and future orientation" (p.28). All participants (*N*=82) completed the BD on a 12" x 18" sheet of white paper with semi-hard pastels as well as the Holmes-Rahe Life Event Scale (1967) which measures stress and the Generalized Contentment Scale (1982) which measures depression. The first group consisted of 14 adults between the ages of 18 to 35 with a history of drug and or alcohol abuse. Several participants in this group had attempted suicide. One of the participants who had attempted suicide depicted himself in his BD in the water. Interestingly, all but one participant in the first group depicted floating bridges. The non-attached bridges may have reflected their lack of connection to people and society. Only two (*n*=2; 14%) participants in the

first group drew a BD moving from left to right – future oriented. The two participants were the only individuals who were making progress in treatment. The second group consisted of 28 chemically dependent women between the ages of 17 to 35. All reported high stress levels on the Holmes-Rahe Life Event Scale. Only six (*n*=6; 22%) participants drew a BD moving from left to right towards future orientation. The third sample consisted of 40 chemically dependent men between the ages of 29 to 60 enrolled in a methadone maintenance program. Half of the participants were employed while the other half were unemployed. Employed participants drew greater left to right-future oriented BD's compared to the unemployed participants.

In her paper, Nucho (1990) recommended asking the following six questions when administering the BD to clients:

> Is it a bridge the client remembers from someplace or is it an imaginary bridge?... What is the bridge made of?... What would it be like to be on that bridge?... What would the bridge say if it could talk?... How would you respond to the bridge?... Where do you suppose the bridge comes from and where might it lead? (Nucho, 1990, p. 28)

Approximately a decade later, American art therapist Stella Stepney (2001) invited adolescents to complete the BD in her clinical sessions in order for them to explore their identity, independence and transition from childhood to adulthood. Stepney asserted that the BD allows clients to recognize their strengths and weaknesses as well to explore personal life conflicts and barriers.

In 2002, experiential therapist Borgmann (2002) invited a women diagnosed with cancer to complete a BD "as a symbolic means of describing herself in the past, the present, and the future" (p.248). One year later, similar to Borgmann, American art therapist Tracy Councill

(2003) introduced the BD to children diagnosed with cancer in hopes of understanding their future expectations and feelings around their disease.

In 2004, a group of mental health specialists in the United States conducted an art therapy study with incarcerated women who experienced the death of a loved one while in prison (Ferszt, Hayes, DeFedele, & Horn, 2004). In their study, eight incarcerated women were directed in the first of eight art therapy sessions to complete the BD. The BD was introduced in order for the researchers to assess and discuss the women's transition, the strength of their support systems, present internal and external threats, and any suicidal ideation. One of the eight participants participated in the study due to the death of her boyfriend. She completed the BD and depicted herself with her boyfriend standing in the middle of the bridge prepared to jump off together to their death. The participant explained that "she wished that they had died together" (Fertzt et. al, 2004, p.194). Although her BD exhibited suicidal tendencies, she denied any suicidal intent. Her BD did express her wishes and feelings over the death of her loved one.

That same year, Israeli social workers Tova Yedidia and Haya Itzhaky (2004) integrated the BD instrument in their social work practice with adolescents exposed to terror attacks. The BD was specifically utilized to diagnose adolescents' resiliency and ability to cope with trauma. Akin to Betts (2005), Yedida and Itzhaky (2004) emphasized the need for greater quantitative research on the BD and highlighted the following BD image variable conclusions:

> A bridge that is not connected to the ground represents the artist's sense of detachment from reality. A bridge that is grounded represents the artist's sense of stability and connection to reality…A person positioned in the middle of the bridge represents the artist's feeling of being stuck. (p.288)

In 2008, American art therapist Elizabeth Sanders Martin (2008) implemented the BD as an assessment and intervention in her medical art and play therapy sessions. Based on her experience, most clients in rehabilitation settings drew a bridge not connected to land masses. Martin believed that the clients' detached bridges may have represented their need to focus only on the present. That same year, Canadian born art therapist Donna Betts (2008) found the BD effective with clients with eating disorders. Betts modified the BD to include "draw a landscape on one side of the bridge to represent life with eating disorder. On the other side of the bridge, please draw a landscape that represents what recovery might look like" (p. 16). And in 2008, Prescott, Sekendur, Bailey and Hoshino (2008) directed the BD to participants in an art therapy study examining resiliency in homeless youth attending a drop-in art center in the US.

In 2009, American art therapists Tricia Teneycke and Janice Hoshino along-side Canadian professor Donald Sharpe implemented the BD with 50 adults experiencing psychosis. The purpose of the study was to investigate BD's completed by adults experiencing psychosis. Participants diagnosed with a psychotic disorder were divided into two experimental groups: (Group 1) participants enrolled in in-patient psychiatric treatment (n= 34) and (Group 2) participants enrolled in out-patient psychiatric treatment (n=26). Additionally, twenty-nine (n=29) mental health workers participated in the study who served as the control group. Thus, a total of 89 adults between the ages of 18 to 56 years participated in the study. All participants were given Crayola markers and a white 12 x 18 - inch sheet of paper. Participants were directed to "Draw a bridge connecting where you are now to where you would like to be. Place yourself somewhere in the picture" (Teneckye et al., 2009, p. 299). One limitation to the study procedures was that certain participants completed the BD in a group setting while others completed the BD in a one-on-one setting.

Since Hays and Lyons did not present a rating scale for the BD, the Teneycke research team (2009) designed a rating scale by merging the chromatic-based Diagnostic Drawing Series (DDS; Cohen, 1986) with the Formal Elements Art Therapy Scale (FEATS; Gantt & Tibone, 1998) rating systems. Interestingly, Teneycke et al. (2009) concluded in their study that certain FEATS scales were difficult to apply to the BD. Therefore, the researchers stressed that "researchers and clinicians alike should be cautious when taking scales from one assessment and applying those scales to another assessment" (Teneycke et al., 2009, p.301).

Their rating scale included seven of 12 Hays and Lyons' BD image variables: placement of self, solidness of bridge attachments, directionality, placement of the future, elaboration, bridge connection, and matter under the bridge. In their BD study, the researchers presented four hypotheses. Hypothesis one projected that in regards to BD image variable - prominence of color, in-patient participants would display minimal color in their BD, out-patient participants would display moderate color and control participants (mental health professionals) would present maximum color in their BD. Hypothesis two projected that in regards to BD image variable – integration, in-patient participants would display minimal integration (relationships between image elements) in their BD compared to out-patient participants and control participants. Hypothesis three projected that in regards to BD image variable - solidarity of the bridge attachment, hospitalized in-patient group participants would display the lowest percentage of attached bridges in their drawings. Hypothesis four projected that in-patient participants would integrate more words or numbers in their BD compared to the out-patient participants and the control participants. Out of the four hypotheses, only hypothesis one regarding prominence of color was statistically significant. The in-patient group displayed less color in their drawings compared to the comparison group.

As for the BD image variable descriptive results, the control group of mental health professionals depicted a greater number of images with left to right direction and future goals in the right quadrant compared to both experimental groups with participants experiencing psychosis (Teneycke, et al.,2009). In the study, Teneycke et al. as well examined inter-rater agreement. Four raters rated the BD's. Two raters were art therapy students and two raters were non-art therapy students. Sufficient inter-rater reliability was not obtained for BD image variables integration and bridge attachment.

The following year, Heo and Jue (2010) conducted a BD study in South Korea. The study explored the relationship between adolescents' suicidal ideation levels and their BD's. One-hundred and twenty-eight (*N*=128) male and female high school students between the ages of 15 and 18 exhibiting suicidal ideation participated in the study. The participants were divided into two groups: (1) high suicidal ideation and (2) low suicidal ideation participants. The researchers investigated all twelve of Hays and Lyons (1981) BD image variables and their rating scale did not utilize the Diagnostic Drawing Series (DDS; Cohen, 1986) or the Formal Elements Art Therapy (FEATS; Gantt & Tabone, 1998) rating systems. The following four BD image variables exhibited significant differences between the high and low suicidal ideation groups: risk of drawn situation, bridge attachment, bridge materials (tree, rock and rope) and bridge type (pedestrian, highway, elevated and stepping stone). High suicidal ideation participants drew greater bridge drawings depicting dangerous situations such as "high cliffs, or strong winds and waves" (Heo & Jue, 2010, p. 615) and greater left to right-future oriented images than the low suicidal ideation participants. Low suicidal ideation participants drew greater solid bridges compared to the high suicidal ideation participants. The most prevalent matter drawn under the bridge for both high and low suicidal ideation participants was water.

Additionally, horizontally was the preference for axis of paper for both high and low suicidal ideation participants. The researchers suggested that the BD art-based instrument may assess suicidal ideation in individuals.

Two years later, similar to Teneycke and her research team (2009), Martin and Betts (2012) designed a separate BD rating scale based on the chromatic-based FEATS (Gantt & Tabone, 1998).

In 2012, American art therapist Kimberly Campbell conducted a BD validity study. A total of 108 young adults enrolled in undergraduate studies at the University of Montana in the United States participated in the study. Seventy of the participants (64.8%) were female. On a 12 x 18 - inch sheet of white paper with ten standard colors of Crayola markers, participants were asked to "Draw a bridge going from some place to some place…Place a dot to indicate where you are in the picture…Indicate with an arrow the direction of travel" (Campbell, 2012, p.44). Upon drawing completion, participants were then asked to answer specific descriptive questions on a separate sheet of paper pertaining to the specific places drawn on either side of their bridge.

In the study, Campbell examined specific image variables contained in the BD's that addressed goal-directed thoughts, depressive affect, future orientation and career choices. The study as well explored inter-rater agreement. The two image raters were art therapists. Campbell designed a BD rating scale designated as the Brown Campbell Bridge Drawing Rating Scale (BCBDRS) which was built upon eight of Hays and Lyons (1981) original BD image variables. Unlike Teneckeye et al's (2009) and Martin and Betts (2012) rating scale, Campbell's BD scale did not include the FEATS. In the study, Campbell specifically examined if eight BCBDRS image variable scores were correlated with scores on the Dispositional (Trait) Hope

Scale (DHS; Snyder et al., 1991), the Center for Epidemiologic Studies-Depression Scale (CES-D; Radloff, 1977) and the Career Decision Scale (CDS-D; Osipow, Carney, Winer, Yanico, & Koschier, 1976). Approximately half of the sample completed the BD first, and then completed the three self-report questionnaires. Though the sample was divided into two groups in regards to instrument procedure, similarities and differences between the groups was not discussed. Campbell presented eight hypotheses. All eight hypotheses were not supported. No significant differences were observed between the eight groups. One significant finding was that total hope scores were higher among participants whose BD's were not future oriented. Campbell posited that perhaps the target high hope participants at the time of the study believed that they were "where they need to be in terms of their goals and orientation towards the future" (p.60).

Regarding the study's BD image variable descriptive results, seventy-five (69%) of participants images were left to right-future oriented. Ninety-three participants (86%) depicted no direction of travel in their drawings. Fifty-eight participants (53.7 %) in the study depicted water underneath their bridge (Campbell, 2012). The study's thematic analysis found the following "places" themes on either side of the bridges:

> *Fantastical or imaginative places* (e.g., "a far away land," "the galaxy or space," "asguard…"a bright castle," "a valley of candles," or "the top of a palm tree"); *general concrete places* (e.g., home, school, a city, the wilderness, a beach, or a cliff,); *specific geographic places* (e.g., New York city, Colorado, Southeast Asia, Butte, or the University of Montana); *abstract places or concepts* (e.g., "a cloudy and dark place," "a bright, sunny place," "there is nothing on the left," "an alleged greener pasture," "heaven where we can reach our ultimate purpose with the creator," "the unknown," "success," or "failure"); *places with feelings attached* (e.g., "a nature filled area that is relaxing and

depicts the perfect scene," or "a boring, old, and drab place"); *places that relate specifically to the life course* (e.g., "my childhood youth," "graduation," "in the hospital with an eating disorder," or "The standard life one is expected to live. A house, a family, even a little dog [sic]. A great job and the struggle to be financially sound,"); *places that are goal-oriented or relate specifically to a timeline* (e.g., "physical therapy school," "being an event planner in a big city," "starting over as a freshman at the UM," or "a professional in the working force").

(p.69-70)

And in 2013, Canadian art therapist Darewych (2013) conducted a BD pilot study with institutionalized orphans in Ukraine who were isolated from society and without a secure parental attachment. The BD assessment was chosen based on the work of Victor Frankl (2006). Frankl, a logotherapist and Nazi concentration camp survivor asserted that even individuals in severely limited settings separated from society have the ability to find meaning in life and hope for a better future. The researcher used the BD to attempt to understand if institutionalized orphans have the ability to envision and draw their future life, goals and hopes.

Because the primary interest of the pilot study was in the orphans' intrinsic capacity to envision their future life, the BD directive was modified by including a path to encourage a psychological shift to the future. The path is commonly used metaphorically as "courses of action/ways of living" (Falck & Gibbs, 2012, p. 262). A number of psychologists use the path metaphor in their developmental theories (Damon, 2010; Frisch, 2006; Butler 2010). In art therapy, art is a path which leads the creator's soul towards meaningful life sources as people, places and objects (Allen, 2005). Moon (2007) in his art therapy sessions often requests clients to draw an image of a path which has brought them to therapy.

On a white 8.5 x 11- inch paper with a sharp No. 2 pencil, participants of the pilot study were directed to “Draw a bridge from someplace to someplace. The bridge connects to a path. Draw the path and write where it leads you to,” (Darewych, 2013, p. 87). This new conceptualization of the BD was named the Bridge Drawing with Path (BDP), and it also added an emphasis on written associations to the path. Groth-Marnat (1997) recommended that administrators of projective drawing assessments include an “inquiry stage” by requesting participants to tell a story about their image. The inquiry component in the original BD was optional "If you wish, you may describe your picture in words" (Hays & Lyons, 1981, p. 208). Subsequent BD researchers as well suggested that participants tell a story about their BD verbally or in writing (Campbell, 2012, Nuncho, 1990; Teneycke, et al., 2009). Because the BDP represented a new assessment it was decided to include Groth-Marnat’s and previous BD researchers’ suggestions and direct BDP participants to write about the image they created; specifically where their path was leading to.

In the BDP pilot study (Darewych, 2013) 258 orphans from 32 Ukrainian orphanages between the ages of 8 and 20 completed the BDP while attending a summer life skills camp in Ukraine. The BDP’s image variables directionality and path quadrant results confirmed that these institutionalized orphans had the ability to find meaning in life and perceive and draw their future but only a small percentage. Less than half (40%) of the orphans drew BDP’s moving into the future-right quadrant. In addition, only 44% of the orphans depicted their path in the future-right quadrant. Not surprisingly, 86% of future comments were written by adolescent orphans who at the time of the study were psychologically preparing for their departure from orphanage to society. More than half (61%) of the Ukrainian institutionalized orphans drew floating bridges; not attached to land. Female participants in the study drew a greater number of bottom

arched bridges and bridges crossing over water compared to male participants. Only eleven orphans (4%) depicted self in their BDP.

In addition to the above image variable results, the modified assessment showed that the psychological and image shift intended by the new directive resulted in participants placing emphasis on their life paths, goals and stories rather than the bridge. The written associations attached to the BDP pathways revealed the participants goals, orientations, hopes and their sources of meaning in life (i.e., home, family, friends, present and future careers and education).

The Bridge Drawing with Path (BDP) Art-based Assessment

Austrian psychologist Elizabeth Lukas (1998) asserted that the key to living a truly meaningful life is to "build a bridge between the meaning of life as the guiding ray of providence that is invisible but perceptible and the personal life goals that are visible in acts of will and in wishes" (p. 311). The BDP art-based assessment summons an individual to visualize, draw and clarify a bridge that links their past and present life to a path which meanders towards future ambitions and inspirations. Butler (2010) asserted:

> When we have a clear vision, we feel more connected to the world, more alive. The gap between our thought and action, our internal world and external world, vanishes, and we more fully occupy our "self". Our everyday choices feed off our vision the way a lantern flame feeds off kerosene. (p. xvi)

Butler further explained that when individuals undergo a life crisis, they journey through an "impasse cycle"; moving from feeling stuck to imagining and shifting towards goals and a new life with "wider" meanings. Butler's impasse cycle includes six phases: (1) Arrival of crisis, (2) Deepening of crisis, (3) Letting go and opening to new information, (4) Shifting, (5) Seeing anew and (6) Taking action.

In therapy sessions, the BDP art-based assessment may be introduced to a client in the third, fourth, and fifth phase of the impasse cycle. In phase three, the BDP may allow a client to visualize a path or multiple paths that may cause a psychological shift towards positive and meaningful life pathways. In phase four, the BDP, may allow a client to visualize present and future people, places and objects which may cause movement or change in their life. British brief and solution-focused therapist Barry Winbold (2011) wrote:

> Change is possible and …action or movement is inevitable. Change is of course inevitable as it is happening all the time; nothing is constant or static, it is just a question of making sure that the client begins to notice positive change, however small, rather than focusing endlessly on the negative aspects…And change is also about action and movement. (p. 119)

In phase five, the BDP may allow a client to deeply reflect on future life choices and goals.

When directing the BDP, the therapist may direct the client to give voice, primarily in first person to the bridge and the path. Art therapist Moon (2007) recommended presenting the following question: "If you could give the path a voice, what would it say?" (p.42). Moreover, art therapists; specifically expressive or creative arts therapists may request their clients to visualize and/or dramatize themselves standing on a bridge which is connected to a path. The therapist may then direct the client to move towards the path and then walk along the path which leads them to an endpoint defined by the client. In therapy sessions, the therapist metaphorically guides their clients towards well-lit and positive life pathways.

In research, the BDP may inform the investigator if the participant is stuck; lacking energy and "flow" (Csikszentmihalyi, 1991) or is moving forward along their life path and striving towards positive and intrinsic or extrinsic goals. Kasser and Ryan's (1996) study

concluded that an individual's life goals fall into two categories: intrinsic and extrinsic. Intrinsic goals include pursuit of personal growth, health, intimate relationships and community involvement. Extrinsic goals include the pursuit of financial success, fame and an appealing image. The researchers found that individuals who strive towards intrinsic goals are more likely to find meaning in life.

For research purposes, in order to enhance rating and understanding of BDP images, the BDP was designed to use a single white 8.5 x 11- inch paper with a sharp No. 2 pencil. Historically, projective drawing assessment developers directed individuals to complete the drawing on a single white 8.5 x 11 - inch paper with a sharp No. 2 pencil (Groth-Marnat, 1997). However, in recent years, art therapists have been directing individuals to complete BD drawings with chromatic materials such as crayons, colored pencils, pastels or felt-tip markers on a larger white 12 x 18 - inch paper (Campbell, 2012; Nucho, 1990; Teneycke et al., 2009) and have been designing rating scales for BD chromatic drawing tests based on the Formal Elements Art Therapy Scale (FEATS; Gantt & Tabone, 1998). Teneycke and her research team (2009) and Martin and Betts (2012) designed separate BD rating scales based on the chromatic FEATS.

The BDP art-based assessment rating scale includes seven of 12 Hays and Lyons (1981) original formal BD image variables. In addition, the BDP includes two new image variables: Path Quadrant and Right Path Rotation. In the BDP, the endpoints of paths may be viewed as goals and sources of meaning in life.

Summary

In the field of art therapy, the Bridge Drawing (BD; Hays & Lyons, 1981) is an art-based assessment in which individuals generate an image thought to reflect their perception of their past, present and future life. In a recent pilot study (Darewych, 2013), the researcher used the BD

to attempt to understand if institutionalized orphans have the ability to envision and draw their future life, goals and life meaning. Because the primary interest of the pilot study was in the orphans' intrinsic capacity to envision their future life, the BD directive was modified by including a path to encourage a psychological shift to the future. This new conceptualization of the BD was named the Bridge Drawing with Path (BDP), and it also required written associations. The BDP was designed using a single white 8.5 x 11- inch paper with a sharp No. 2 pencil and individuals are instructed to "Draw a bridge from someplace to someplace. The bridge connects to a path. Draw the path and write where it leads you to," (Darewych, 2013, p. 87).

In addition to other BDP pilot results, the modified assessment showed that the psychological and image shift intended by the new directive resulted in participants placing emphasis on their life paths, goals, sources of meaning in life and stories rather than on the bridge.

The BDP pilot study caused some questions to be raised about the potential of the BDP with adults. For example, would adults have the same responses to depict life pathways, goals, orientations, hopes and sources of meaning in life (i.e., home, family, friends, career, education, spirituality)? Might adults' BDP image directionality and written associations be associated with other measures of hope and meaning in life? Finding meaning in life in our current hectic world is a challenge; especially for youth and young adults (Damon, 2009; Hoffmann, 2009). Damon (2009) exclaimed that a number of today's youth and young adults living in industrial nations lack life meaning and are suffering from "directionless drift" and "developmental paralysis".

The BDP may be a better global method of measuring the constructs of meaning, goal and hope than self-report questionnaires because art is a universal language (Arrington, 2005; Councill, 2003; Rubin, 1999; McNiff, 2009) and "in any age and in any country, is humanity's

first model for sharing experiences and communicating meaning" (Arrington, 2001, p. vii). Moreover, McNiff and Barlow (2009) affirmed that "of all expressive modes, language most clearly presents cultural differences whereas the visual arts, music and dance are more interchangeable and universal" (p. 102). Most recently, psychologist Steger and his research team (2013) conducted a pilot study exploring photography as a "new method" of measuring sources of meaning in life.

McNiff and Barlow (2009) also emphasized the need for more cross-cultural art therapy studies beyond North America. Recently, Heo and Jue (2010) introduced the BD to adolescents' exhibiting suicidal ideation in Soul Korea and Canadian art therapist Darewych (2013) introduced the BDP to institutionalized orphans in Ukraine. Such cross-cultural studies raise the awareness of the field of art therapy and art-based assessments across the globe (Alyami, 2009).

Similarly, the field of positive psychology has primarily conducted the bulk of its life meaning and hope studies in the United States with college and university students (Steger et al., 2006; Michael & Snyder, 2005). Only recently have meaning in life studies been conducted with non-American samples (e.g., Steger, Frazier & Zacchanini, 2008; Steger & Samman, 2012; Zhang & Xu, 2011).

Overall, this literature review examined the history of the BD and BDP art-based assessments in previous studies and clinical sessions throughout the globe and most recent development of positive psychology constructs of meaning in life and hope.

CHAPTER 3

Method

Research Question

The primary research question for the study was: Whether a psychometric association exists between the BDP scores; specifically written associations and right-future image directionality and scores on the ASHS (Snyder et al., 1996) and the MLQ (Steger et al., 2006). All three assessments (BDP, MLQ and ASHS) measure the same construct: that of an individual's goal-related pursuits.

The study as well explored the following two questions: do adults have the same responses to depict life pathways, goals, orientations, hopes and sources of meaning in life (i.e., home, family, friends, career, education, spirituality) compared to institutionalized orphans? Could the BDP rating system be improved to enhance both the rating system for image variables and written associations?

Research design

The current cross-sectional study was devised to address the research questions using higher education students studying in Britain (N = 25) and Canada (N = 19). Damon (2009) and his colleague's sources of life meaning taxonomy was used to rate written associations.

Participants

Convenience sampling of higher education students was used for this study. For recruitment of participants, the researcher contacted universities in Australia, Britain, Canada and Hong Kong as well as a Canadian college. In the end, participants were recruited from a Canadian community college, a Canadian private graduate program and a university in Britain who were 18 years of age or older and enrolled in art therapy or art-psychology courses. Forty-

four higher education students between the ages of 18 and 63 years participated in the study. Participants did not receive class credits for participating in this study.

Figure 1 displays the participants in the BDP study.

Participants were mostly female (89%) and Caucasian (75%). Participants' race/ethnic backgrounds included White/British (20%), White/European (11%), White/Canadian (9%), White/Polish (7%), German (5%), Asian (5%), White/Scottish (4%), African/American (2%), Black/British (2%), Ghanian (2%) Middle-Eastern (2%) and other (31%). Most of the participants were graduate level students (82%) and most were right-handed (91%).

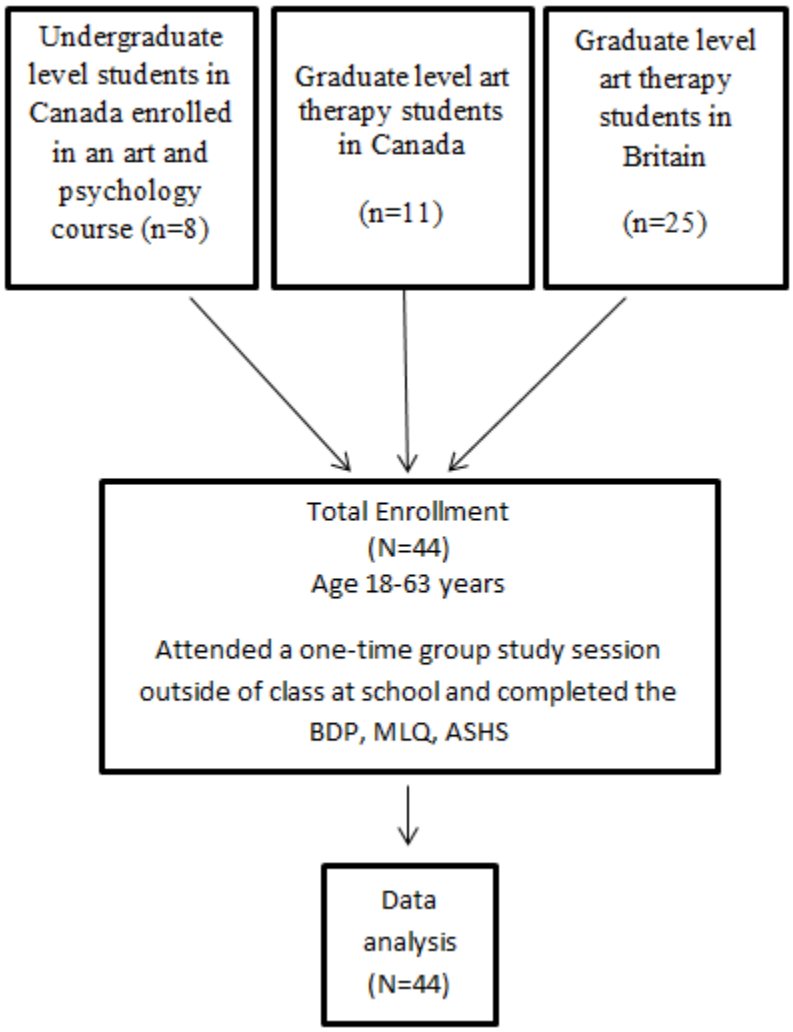


Figure 1. Participants in bridge drawing with path study.

Measures

Due to all three measures' (BDP, ASHS and MLQ) goal-related orientation, the triangulation research method (see Figure 2) was used in this study. Participants completed the three measures (BDP, ASHS and MLQ) in a single 30 minute session. Additionally, the triangulation research method was used in order to determine if the BDP art-based assessment complements the ASHS and/or the MLQ.

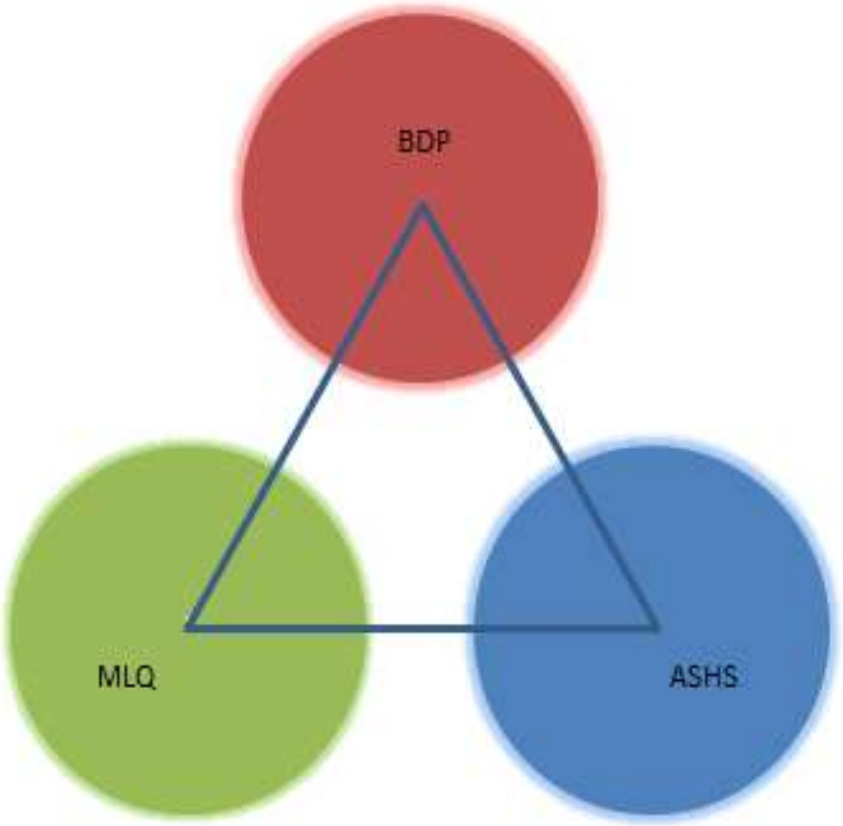


Figure 2. Methodological triangulation approach of study.

Bridge drawing with path (BDP) art-based assessment. The pencil-and-paper BDP art-based assessment, based on Hays and Lyons' (1981) BD projective drawing instrument was utilized in this study. The BDP can be completed in five to 10 minutes. Participants are given a sharp No. 2 lead pencil and a white 8.5 x 11- inch paper and asked to "Draw a bridge from someplace to someplace. The bridge connects to a path. Draw the path and write where the path leads you to" (Darewych, 2013, p. 87). The BDP ordinal rating scale created by Darewych was used for this study (see Appendix J). The BDP rating sheet includes the following seven of the 12 Hays and Lyons (1981) formal BD image variables: (1) axis of paper, (2) image directionality, (3) placement of self in picture, (4) solidarity of bridge attachments (5) type of bridge depicted, (6) matter down under the bridge and (7) written associations to drawings. Hays and Lyons' image variable - vantage point of viewer was discarded from the present BDP rating scale due to low inter-rater agreement scores and coding difficulties addressed by raters in the pilot study (Darewych, 2013).

Due to the addition of the path metaphor, the rating sheet also includes the following two image variables: Path quadrant and Right - Future path rotation (see Figure 3).

	Bridge Drawing with Path Image Variables	Observations	Goals
Hays and Lyons (1981)	Axis of Paper	Image drawn horizontally or vertically	Determine axis preference for BDP drawing
	Image Directionality	Direction of travel along bridge and path. Left paper quadrant considered the past and the right paper quadrant considered the future	To determine if images created by participants exhibit movement/flow and if right-future oriented
	Placement of Self	Self depiction	Determine if participants depict Self in drawing
	Bridge Connection	If bridge depicted connected to land mass or floating	To determine if participants bridges connected to land mass or floating bridges
	Bridge Type	Common bridge types with participants: arched versus non-arched	To determine if female participants draw greater arched bridges
	Matter under Bridge	Water, land or other under bridge	To determine if female participants draw greater bridges over water
	Written Association	Written comments on path	To determine participants life meaning, goal, hope pathways
New Pilot study Image Variables	Path Quadrant	Path in left (past) or right (future) paper quadrant	Determine if participants paths depicted in right-future quadrant
	Right Path Rotation	Right path rotates back to the left (past)	Determine % of right (future) paths rotating into past
Hays and Lyons (1981)	Places drawn either side of bridge	omitted	modified into path quadrant
Image Variables	Emphasis of Elaboration	omitted	modified into right path quadrant
Omitted	Consistency of Gestalt	omitted	Emphasis on path
	Bridge Construction	omitted	Raters unable to decipher bridge construction material
	Vantage Point of Viewer	omitted	Due to weak BDP pilot study rater agreement

Figure 3. BDP Image Variables

Adult state hope scale (ASHS). The Adult State Hope Scale (ASHS: Snyder et al., 1996) is a 6-item questionnaire designed to measure an individual's state of hope and goal-directed thinking (see Appendix G). The subscales consist of Agency (goal-directed thinking) and Pathways (plan to meet goals) and are interrelated. Total scores can range from a low of 6 to a high of 48. The instrument is self-administered and each participant rates himself or herself on an eight-point Likert scale for each item. The questionnaire takes approximately five minutes to complete.

Meaning in life questionnaire (MLQ). The Meaning in Life Questionnaire (MLQ: Steger et al., 2006) is a 10-item questionnaire designed to measure an individual's effort to find meaning in his or her life (see Appendix F). The instrument is self-administered and requires the participant to rate himself or herself on a seven-point Likert scale. The MLQ takes five minutes to complete. Scores can range from a low of 5 to a high of 35. The MLQ assesses two dimensions of meaning in life. The first dimension, the Presence of Meaning subscale, measures how individuals feel their lives are meaningful. The second dimension, the Search for Meaning subscale, measures how engaged and motivated individuals are in finding meaning or to deepen their understanding of meaning in their lives. Both subscales are independent of one another.

Procedures

Once approval was obtained by the academic institutions, the participants were recruited by means of a student information sheet (see Appendix C) and flyer (see Appendix D). The study investigator was available by email and phone for those students interested in taking part in the study. Participants who volunteered for the study completed the study information and consent form and attended a single 30 minute group study session which occurred at their school, outside-of-class in a designated room allocated by their school administrator. Two research

assistants who were arts therapists conducted the study sessions. A total of five group study sessions occurred in Britain and Canada within a three month period (from the last week of November 2012 to the first week of February 2013). During the group study sessions, participants received a study packet which included: a demographic form, the BDP directive with a sharp No. 2 lead pencil and a white 8.5 x 11- inch paper, the MLQ (Steger et al., 2006) and the ASHS (Snyder et al., 1996). Participants had the opportunity to ask the research assistant questions regarding the three instruments prior to, during and at the end of the study session.

Participant information from school databases was not requested. Instead, the following demographic features were collected by each participant via the participant information demographic form: age, gender, race, ethnicity, left-right handedness, degree major/minor and country of origin (see Appendix E). At the end of each study session, all three instruments (BDP, MLQ and ASHS) were collected by the research assistant and then submitted to the researcher.

Data Analysis

BDP inter-rater agreement analysis. The BDP data were scored by three raters. Raters of three levels of expertise (expert, criterion, and novice) rated the data. For this study, the researcher, a Canadian art therapist was the expert rater. The two other independent raters were also Canadian art therapists. Rater two (criterion) received training in art-based assessments during her art therapy studies while Rater three (novice) did not obtain art-based assessment training during her art therapy studies. Raters inputted their coded data into an Excel rating sheet (see Appendix J). Prior to rating the images, the criterion and novice rater attended a one-hour individual BDP training session conducted by the researcher. Additionally, raters two and three

completed the Confidentiality Consent Form (see Appendix H) and the Rater Stipend Form (see Appendix I).

Inter-rater agreement analysis using Cohen's Kappa was used to determine consistency amongst all three raters (expert, criterion, and novice) for all nine BDP image variables. Cohen's Kappa is a statistical measure of inter-rater agreement which ranges from 0 to 1.0 (>0, poor agreement; 0.0-0.20, slight agreement; 0.41-0.60, fair agreement; 0.4-0.60, moderate agreement; 0.61-0.80, substantial agreement and 0.81-1.00, almost perfect agreement) (Landis & Koch, 1977). Kappa takes change agreement into account. For this study, a moderate Kappa agreement (0.41-0.60) was accepted as good level of agreement. The Expert rater's data was used to represent the raters and for data analysis.

ASHS Analysis. Total hope scores from the ASHS were calculated in order to determine participants' level of hope; specifically if participants were high or low hope individuals. The mean of the total hope score was used as the mid-point. Participants scoring the mean or above were categorized as high hope individuals. Participants scoring less than then mean were categorized as low-hope individuals.

MLQ Analysis. Presence and search for meaning sub-scores from the MLQ were calculated in order to determine participants' level of meaning in life; specifically if participants were high or low presence and search for meaning individuals. The score of 24 was used as the mid-point (Steger, 2010). Participants scoring 24 or above on presence and search were categorized as high presence and search for meaning in life individuals. Participants scoring less than 24 on presence and search were categorized as low presence and search for meaning in life individuals.

Written Associations Thematic Analysis and Coding Process. The researcher examined the BDP-generated written associations for emerging sources of meaning in life and goal-directed word themes by repeatedly reading the written associations. A major word theme category list was created and a numerical code was assigned to each major word theme. For example, code zero was assigned to word theme "home", code one was assigned to word theme "family/friends". BDP-generated written associations presenting multiple word themes were categorized into major and minor themes. Each BDP image rater coded major word themes in one excel column and minor word themes in a second excel column. Inter-rater Kappa analysis was conducted on major word themes only. BDP-generated written associations without major word themes were designated by BDP raters as "other" which were then analyzed for further unique word themes.

Comparative Analysis of BDP, ASHS and MLQ. Scores from the MLQ and the ASHS were calculated in order to determine participants' level of life meaning and hope. The coding of BDP images produced numerical data which was compared to the MLQ and ASHS scores using statistical procedures in order to assess if any associations existed between the BDP image scores and the MLQ and ASHS scores. Specifically, the BDP-generated written associations categorical data were divided into meaningful and non-meaningful associations scores based on Damon and colleagues' (2009) sources of life meaning taxonomy: family (relationships), career, academic achievement, spirituality, sports, arts, community services, political/societal issues. And finally, a Mann Whitney U test was calculated between total written associations word count and meaningful pathways in order to determine if meaningful written associations included greater meaningful words.

Ethical Considerations

Permission to proceed with this study was reviewed and granted by Lesley University's Internal Review Board (see Appendix A) and from three higher learning institutions human subject review boards and administrators for their students enrolled in the schools art therapy and art-psychology courses to partake in the study. The study information and consent form underscored the participants' ability to terminate participation in the study at any time and remove their drawing and self-report questionnaires from the data set after data had been collected. The purpose of the research, anticipated study benefits and emotional risks were addressed to participants in the study information and consent form (see Appendix B). Participation in this study posed no potential risks to participants' well-being beyond those normally encountered in everyday life. Nonetheless, a school counselor and/or school administrator was on standby if any physical, emotional, social, or legal risks did arise. All participants obtained a copy of the signed consent form to keep. At the end of the each study session, participants were able to enter a prize draw of multiple bookstore or Coffee cards.

All instruments were collected by the researcher and then coded to maintain confidentiality and participants' identities. A corresponding identification number was allocated to each participant. The image data given to the raters did not include participants' names. Furthermore, pseudonyms were provided for case vignettes.

CHAPTER 4

Results

Sample

The sample consisted of 44 undergraduate and graduate level students (*Mage* = 31.64, *SD* = 9.76) enrolled in art therapy and art-psychology courses studying in Britain and Canada. Participants ranged in age from 18 to 63 years. Figure 4 shows the frequency distribution of participants' age. Twenty-seven percent (27%) of participants were 35 years of age or older

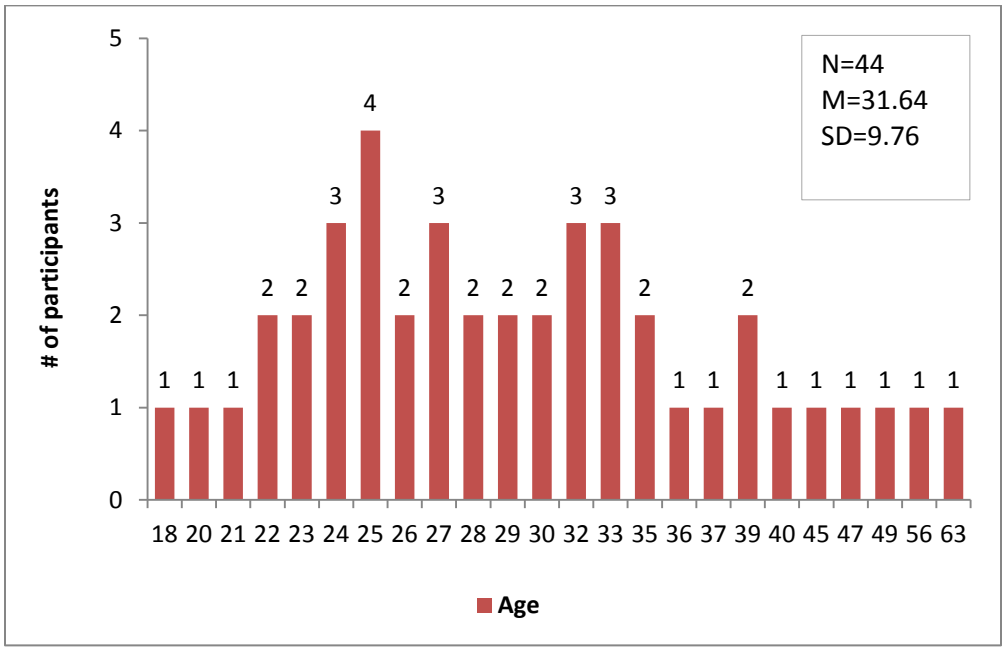


Figure 4. Frequency distribution of participants' ages.

Bridge Drawing with Path (BDP) Scores

The following presents the inter-rater agreement and nine individual image variable scores for the BDP art-based assessment. The overall Kappa results of the inter-rater analysis for the BDP are displayed in Table 1. The overall BDP image variables percentile results are displayed in Table 2.

BDP inter-rater agreement scores. For this study, moderate Kappa agreement or greater (substantial and almost perfect Kappa agreement) was accepted as a good level of agreement. Kappa agreement ranged from fair (0.38) to almost perfect agreement (0.95). Almost perfect agreement was obtained for image variables axis of paper and placement of self. The lowest 'fair' agreement was obtained for image variable bridge connection (0.27). Similar to Darewych's (2013) BDP pilot study, BDP raters struggled with coding image variable bridge connection. Revisions to the BDP image variable directionality subscale in this study based on the pilot study did not strengthen inter-rater agreement. The Expert rater's (rater one) data was used to represent the raters and for data analysis.

Table 1

Inter-rater Kappa Agreement for Bridge Drawing with Path (BDP)

	Raters**				
BDP Image Variable	**EC**	**EN**	**CN**	**Average**	**Kappa Agreement*** **
1. Axis of Paper	0.88	0.76	0.80	0.81	Almost perfect agreement
2. Image Directionality	0.63	0.41	0.36	0.47	Moderate agreement
3. Path Quadrant	0.63	0.34	0.17	0.38	Fair agreement
4. Future Path Rotation	0.65	0.66	0.38	0.56	Moderate agreement
5. Placement of Self	1.00	0.93	0.93	0.95	Almost perfect agreement
6. Bridge Connection	0.29	0.40	0.12	0.27	Fair agreement
7. Bridge Type	0.79	0.79	0.76	0.78	Substantial agreement
8. Matter Under Bridge	0.69	0.76	0.73	0.73	Substantial agreement
9. Written Associations	0.85	0.72	0.72	0.76	Substantial agreement

*$p<0.001$.
**E = Expert, C = Criterion, N= Novice
***(Landis & Koch, 1977)

BDP image scores. The following section presents the descriptive statistics for image variables which received moderate, substantial and almost perfect Kappa agreement: axis of paper, image directionality, future path rotation, placement of self, bridge type, matter under bridge and written associations.

BDP image variable - axis of paper. For this study, participants were given a sharp No. 2 lead pencil and a single white 8.5 x 11- inch paper and requested to draw a bridge which connects to a path. Participants were free to complete their drawing along the horizontal or vertical axis of the paper. Seventy-three percent (73%) of participants drew a bridge and path along the horizontal axis (see Table 2). Similar to the BDP pilot study (Darewych, 2013) and previous BD studies (Hays & Lyons, 1981; Heo and Jue, 2010), the majority of participants in this study depicted their bridge along the horizontal axis.

BDP image variable - directionality. According to Jungian analyst Susan Bach (1990) when conducting image quadrant analysis in art-based assessments, the left quadrant may represent the past and the right quadrant the future. More than half (64%) of participants drawings depicted directional flow moving from left to right into the future quadrant compared to 69% of Campbell's (2009) BD higher education participants; a 5% difference. Figure 5 shows an example of a BDP with left to right future directional flow. Eleven percent (11%) of the drawings depicted directional flow moving into the past (right to left). Eleven percent (11%) of the drawings depicted directional flow moving upwards, five percent (5%) moving downwards and nine percent (9%) of the drawings lacked directional flow (see Table 2). These image directionality findings challenge the significance of left to right directionality and Bach's (1990) left-past and right-future quadrant theory.

question Bach's left-past and right-future quadrant theory.

BDP image variable - right path rotation. All participants drew a path in their BDP drawings. Three quarters of the participants (75%) drew a path in the right-future quadrant. Nine percent (9%) of participants drew a path in the left-past quadrant and nine percent (9%) of participants depicted their path in the centre of the image. Seven percent (7%) of participants

drew a path in the left and right quadrant. Only two participants (4%) drew a path in the right-future quadrant rotating back into the left-past quadrant (see Table 2). One of the rotating paths connected to adulthood and the other had no written associations.

BDP image variable - placement of self. Overall, 18% of participants depicted self in their drawings. One (2%) participant depicted self in the past, one participant (2%) depicted self in the future, three participants (7%) depicted self in the middle of the bridge, and three participants (7%) depicted self both in the left and right quadrant (see Table 2).

BDP image variable - bridge type. Table 2 displays image variable - bridge type results. Ninety-seven percent (97%) of participants depicted a bridge in their BDP drawing. Half of the female participants (51%) drew bottom arched bridges compared to 54% of Darewych's (2013) BDP pilot study female participants, a 3% difference and 60% of Hays and Lyons' BD study female participants, a 6% difference. No (0%) male participants in this study drew a bottom arched bridge. Figure 5 exemplifies a bottom arched BDP.

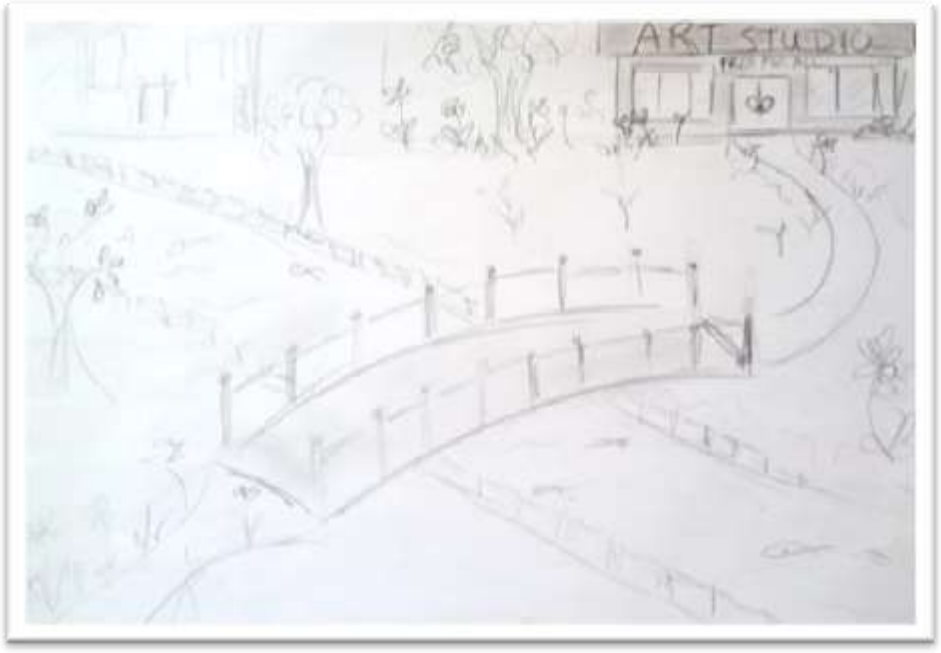


Figure 5. Bottom arched bridge drawing.

BDP image variable - matter under bridge. For this image variable, raters were directed to code what was drawn under the bridge: 1. water, 2. land, or 3. undefined (see Table 2). Fifty-nine percent (59%) of female participants drew water under their bridge compared to 70% of female participants in Hays and Lyons' (1981) study and 60% of female participants in Darewych's (2013) BDP pilot study. Eighty percent (80%) of male participants drew water under their bridge compared to 56% of male participants in Hays and Lyons' BD study and 60% of male participants in Darewych's BDP pilot study. In this study, male participants drew a greater number of bridges crossing over water. The water under the bridge may unconsciously represent the flow of the creator's inner energy or emotions.

Table 2

BDP Image Variables

BDP Image Variables	**Higher education students** *N*=44 **89% F**
	Age 18-63
Axis of Paper - Horizontal	73%
Image Directionality	
Left to right movement (future)	64%
Right to left movement (past)	11%
Upward movement	11%
Downward movement	5%
Stagnant - no movement	9%
Presence of Bridge	97%
Bridge Type	
female - arched bridge	51%
male - arched bridge	0%
Matter under Bridge	
female - H20 water	59%
male - H20 water	80%
female - land	13%
male - land	0%
Presence of Path	100%
Path in left quadrant (past)	9%
Path in right quadrant (future)	75%
Centre	9%
Path in past and future quadrant	7%
Left-Future Path Rotation into Past	4%
Placement of Self	18%
Self in left-past quadrant	2%
Self in right-future quadrant	2%
Self in centre	7%
Self in past and future quadrant	7%

Note: F= female, M=male

BDP image variable – written associations. In this study, participants were directed to draw a bridge connected to a path. In addition, participants were requested to write where their path leads. Table 3 displays the written associations connected to the paths. Based on a thematic analysis of written associations, the 10 most frequent sources of life meaning and goal-directed word themes in descending order were path leading to unknown/somewhere (16%), home (14%), nature (9%), career (7%), spirituality (7%), family/friends (4%), future (4%), city/country (4%), opportunities (4%), and education (2%). Twenty-three percent (23%) of written associations included other unique themes. Based on a thematic analysis, the eight less frequent sources of life meaning and goal-directed word themes in descending order were path leading to life (7%), success (7%), self (4%), acceptance (4%), art studio (4%), wider path (4%), world (4%) and journey (2%) (see Table 4). Table 5 displays this study's major sources of life meaning categories compared to Steger et al.'s (2013) photographic method study's main sources of life meaning categories.

The BDP-generated word theme categorical scores were then divided into meaningful and non-meaningful path scores based on Damon (2009) and his colleague's sources of life meaning taxonomy: family (relationships), career, academic achievement, spirituality, sports, arts, community services, political/societal issues. Seventy percent (70%) of participants wrote meaningful path associations in their BDP images.

A Mann Whitney U test comparing total written associations word count and meaningful path scores indicated the variables were approaching significant, $p = .79$. Meaningful path associations included greater number of sources of life meaning and goal-directed word themes.

Table 3

BDP Image Variable - Written Associations Categories

Written Associations – Sources of Meaning and Goal Category	***N*=44**	**%**
Home	8	14%
Family & Friends	1	4%
Nature	2	9%
City/Country	3	4%
Career	1	7%
Education	1	2%
Future	2	4%
Symbolic/Spiritual	3	7%
Opportunities	2	4%
Unknown/Somewhere	6	16%
Other	12	23%
No comment	1	5%

Table 4

Other Written Associations Categories

Other Written Associations – Sources of Meaning and Goal		
Category	***N*=44**	**%**
Acceptance	2	4%
Art studio	2	4%
Life	3	7%
Self	3	7%
Success	3	7%
World	2	4%
Journey	1	2%
Wide path	2	4%

Table 5

Comparative Analysis of Sources of Meaning Categories

Sources of Meaning Category	**Steger et al. 2013 photographic method**	**This Study BDP method**
Relationships i.e. family, friends	X	X
Physical Environment i.e. home, school	X	X
Nature i.e. forest, mountain, river, woods	X	X
Hobby/Leisure i.e. art, adventures	X	X
Spirituality/Religion	X	X
Future	X	X
Education	X	X
Career	X	X
Values i.e. happiness, love, acceptance, knowledge	X	X
Self	X	X
Possessions	X	
Everyday necessities	X	
Pets	X	
Organizational activities	X	
Technology	X	
City/Country		X
Wider path		X
Journey		X
Unknown/Somewhere		X
Miscellaneous	X	X

ASHS Scores

Mean scores for participants on the ASHS agency and pathway subscales were 18.48 (*SD* = 3.26) and 18.52 (*SD* = 3.68). The ASHS mean total score was 37.00 (*SD* = 6.35) and similar to the total mean score reported by Snyder et al. (M = 37.17: 1996). The coefficient alpha for the agency subscale was .81, .66 for the pathways and .84 for the total ASHS scale, representing good internal consistency. All above scores were similar to normative scores reported by Snyder et al. (1996). The correlation between the agency and pathways subscale was significant at .68, *p*

<.001. This finding supports Snyder et al.'s (1996) research that a correlation exists between ASHS agency and pathways subscales. Hope was not related to age (r = -.02, p = .91).

The sample was divided into high and low hope individuals according to the total mean score (M = 37.00) on the ASHS. Participants scoring 37 or above were categorized as high hope individuals. Participants scoring less than 37 were categorized as low hope individuals. Sixty-seven percent (67%) of the participants scored high on total hope. Table 6 displays the state hope means and comparisons between high and low hope participants. Differences between high and low hope individuals on the pathways, agency, and total state hope scores were statistically significant indicating that high hope individuals scored higher on all variables.

Table 6

ASHS Agency and Pathways Means and comparisons

	High		Low		t
	n= 28	M (SD)	n = 16	M (SD)	
Agency		20.54 (1.50)		14.63 (3.72)	t (17.8) = 6.08, p < .001
Pathways		20.18 (0.39)		15.94 (3.13)	t (18.4) = 5.14, p < .001
Total Hope		40.71 (2.11)		30.56 (5.79)	t (17.3) = 6.77, p < .001

Note: Appropriate adjustments made to degrees of freedom for interpretation because Levene's test showed unequal variances

MLQ Scores

Mean scores for participants on the presence and search subscales were 25.43 (*SD* = 6.56) and 26.52 (*SD* = 5.97) respectively. The participants presence scores were similar to Steger et al.'s (*M*=24.0: 2006) original normative study scores. The participants' search scores were slightly higher than Steger et al's. (*M* = 22.5: 2006) study scores. The coefficient alphas for the presence and search subscales were .89 and .85, representing good internal consistency. The correlation between the presence and search subscale was not significant $r = -.10$, $p = .52$ underlining that both subscales are independent of one another (Steger et al, 2006). Unlike previous meaning study findings (Reker & Fry, 2003; Steger et al, 2006), both presence of meaning ($r = -.03$, $p = .84$) and search for meaning ($r = -.17$, $p = .28$) scores were not related to age.

Participants scoring 24 or above on presence and search were categorized as high presence and search for meaning in life individuals. Participants scoring less than 24 on presence and search were categorized as low presence and search for meaning in life individuals. Forty-five percent (45%) of participants scored high on presence and search. Twenty-three percent (23%) scored high on presence but low on search. Thirty percent of participants (30%) scored low on presence but high on search and two percent (2 %) scored low on presence and search.

Table 7 displays the presence and search means and comparisons between high and low meaning participants. Differences between high and low presence of and search for meaning scores were statistically significant indicating that high meaning individuals scored higher on all variables.

Table 7

MLQ Presence and Search Means and comparisons

	High		Low		*t*
	n	*M* (SD)	*n*	*M* (SD)	
Presence	31	28.90 (3.03)	13	16.54 (4.68)	t (42) = 10.46, $p < .001$
Search	34	29.09 (3.30)	10	17.80 (4.59)	t (42) = 8.68, $p < .001$

Note: Assumption of equal variance was met.

Concurrent Associations between BDP, ASHS and MLQ

In regards to the BDP and the ASHS, the results of a chi-square test of independence $\chi^2(1) = .03$, $p = .85$ indicated there was not a statistically significant association between BDP meaningful path written associations scores and total state hope scores. Additionally, the results of a chi-square test of independence $\chi^2(1) = .01$, $p = .91$ indicated no statistically significant association between BDP left to right-future image directionality scores and total state hope scores.

In regards to the BDP and the MLQ, the results of a chi-square test of independence $\chi^2(1) = 5.23$, $p = .02$ indicated a statistically significant association between BDP meaningful path written associations scores and MLQ - presence of meaning scores. Participants who scored high on MLQ – presence of meaning wrote significantly greater meaningful paths in their BDP leading to home, relationships, careers, education and spirituality than participants who scored low on MLQ - presence of meaning. The results of a chi-square test of independence $\chi^2(1) = .04$, $p = .85$ indicated there was no statistically significant association between BDP left to right - future image directionality and MLQ - presence of meaning scores. This finding challenges the

significance of left to right directionality and Bach's (1990) left-past and right-future quadrant theory.

Table 8 displays the association of BDP written association path themes with ASHS agency and pathway scores. Table 9 displays the association between BDP written association path themes and MLQ presence of and search for meaning scores. The data support previous research that individuals with higher levels of meaning report more future pathways (Steger, Kashdan, Sulliven, & Lorentz, 2008),

Table 8

Association of BDP written path themes with ASHS

		ASHS Pathways Subscale	
		High	**Low**
ASHS Agency Subscale	**High**	**55%** home (4), career (2) myself, world adulthood, future, family (3), friends, wider path opportunities, spiritual, twists and turns, art studio education, nature, acceptance	**16%** home, past, opportunities career, adventures
	Low	**9%** structured spontaneous way, somewhere unknown, career, family, love spiritual, acceptance, city	**18%** unknown (2) , home (3)

Table 9

Association of BDP written path themes with MLQ

		MLQ Search Subscale: High	MLQ Search Subscale: Low
MLQ Presence Subscale	**High**	**45%** home (6) , self-reliance, family (3) future opportunities (2), friends, education wider path (2) , twists and turns/highs and lows nature, new adventures (2), career, city spontaneous and structured way	**23%** self, past, unknown, opportunities, adulthood future, nature, art studio
	Low	**30%** home, somewhere (2), spiritual, unknown (2) career (2) , city, acceptance (2), success nature	**2%** somewhere/spiritual

Thematic Analysis of Paths

The following thematic exploration describes in greater depth the collective written association path themes presented by participants in their BDP drawings.

Path to home. Figure 6 was created by a 36-year old Caucasian-Swedish participant studying in Canada. She drew a linear bridge connected to land and linked to a right-future quadrant path meandering towards mountains. Her inscribed path written association was "This is a path that leads from a dark forest, across a river, up a wide open path to the mountains. There are many little homes up in the mountain. One of them is mine."

Figure 6. Path to home.

Path to nature. Figure 7 was created by a 27-year old Caucasian-European female student studying in Britain. She drew a bottom non-arched bridge connected to a multi-circular path. The written association attached to her path was as follows:

I'm walking in a forest, nature area and enjoying the scenery around me. The place I left behind was fall/wintery and when I cross the bridge it's early spring, it warm, sunny. I

cross over the bridge to get to the other side of this path I had been walking on and noticed the river below. I'm looking forward to what there may be on this other side. I also noticed that my walkway space expanded. Off to explore new adventures.

Figure 7. Path to nature.

Path to family and friends. Figure 8 was created by a 23-year old Caucasian-Irish/British/Russian female student studying in Canada. She drew a linear bridge connected to a city and land with a path commencing from the centre of the image moving into the left-past quadrant. Her written association specified "My pathway is leading me and my friends on new adventures. Hopefully in new and or exotic places."

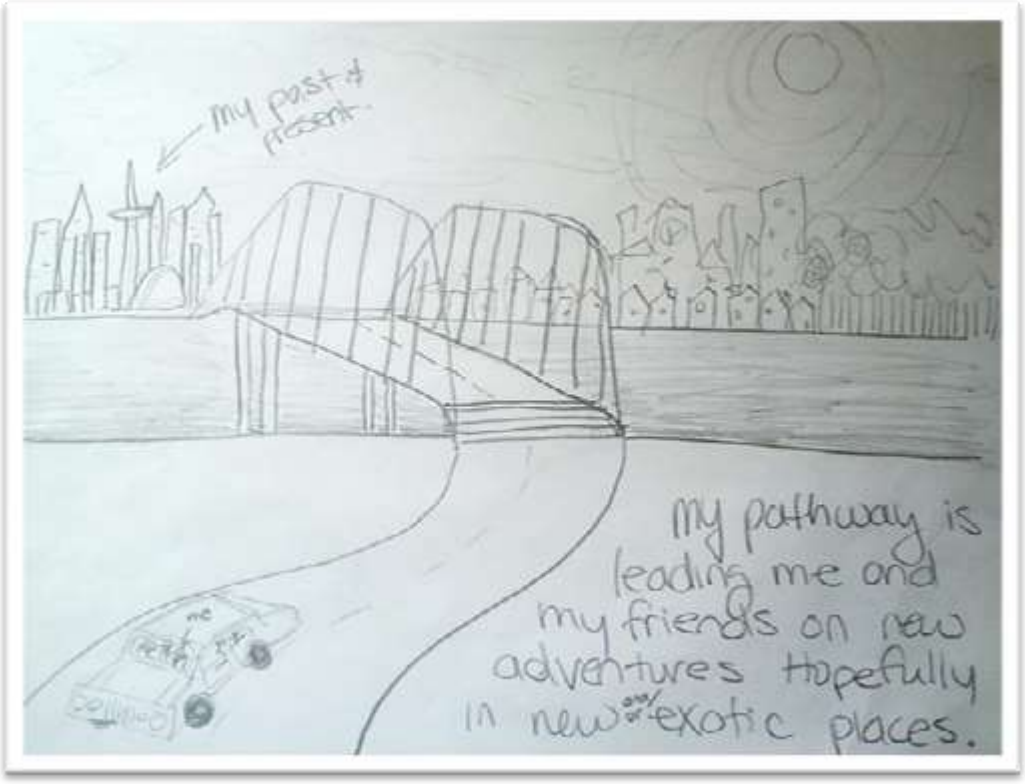


Figure 8. Path to friends.

Path to future. Figure 9 was illustrated by a 26-year old Caucasian- British/Guyanese female student studying in Britain. She drew an arched bridge attached to land with a path in the right-future quadrant. The written association linked to her path was as follows:

> My path leads from the kissing bridge, a bridge in the…where my dad is from. I would like my path to lead me to the exciting opportunities that a wait for me in my future. For when I finish the course…for when I work full-time move to US and settle down have a family and one day do a PhD. The path leads to my dreams and aspirations.

Her path described multiple connections to life sources: family, education and career.

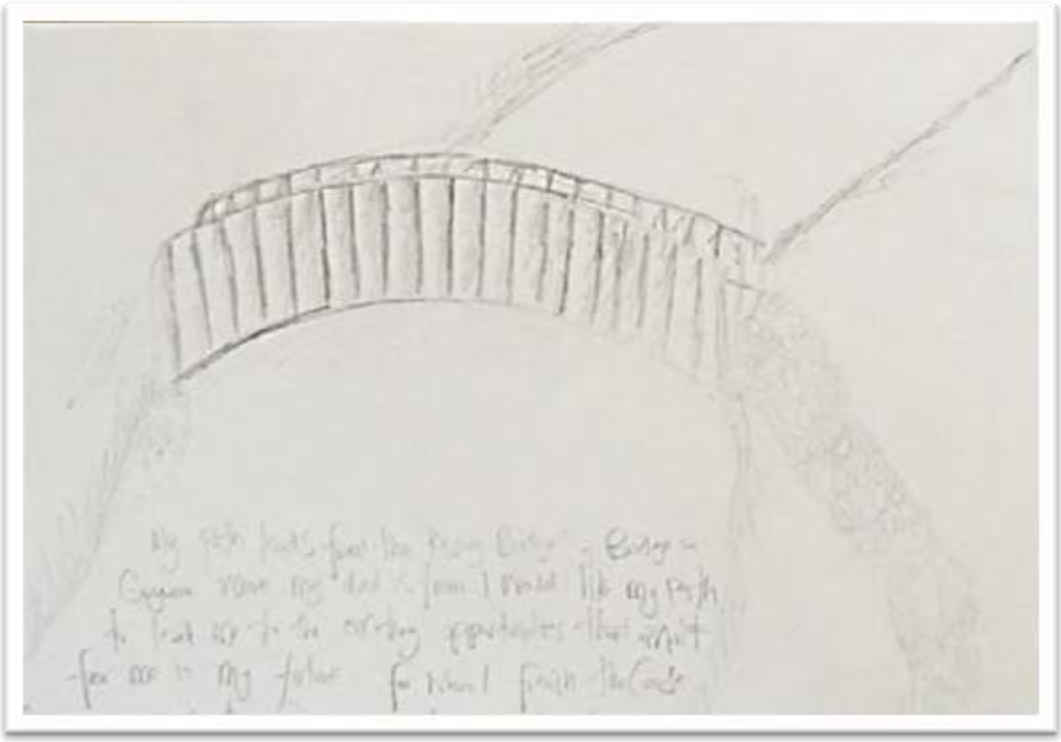


Figure 9. Path to future.

Path to career. Figure 10 was created by a 27-year old Caucasian/German female student studying in Canada. In her BDP image, she drew a floating bridge in between clouds connecting "Germany" with "The World/International work for United Nation or U.N.E.S.C.O."

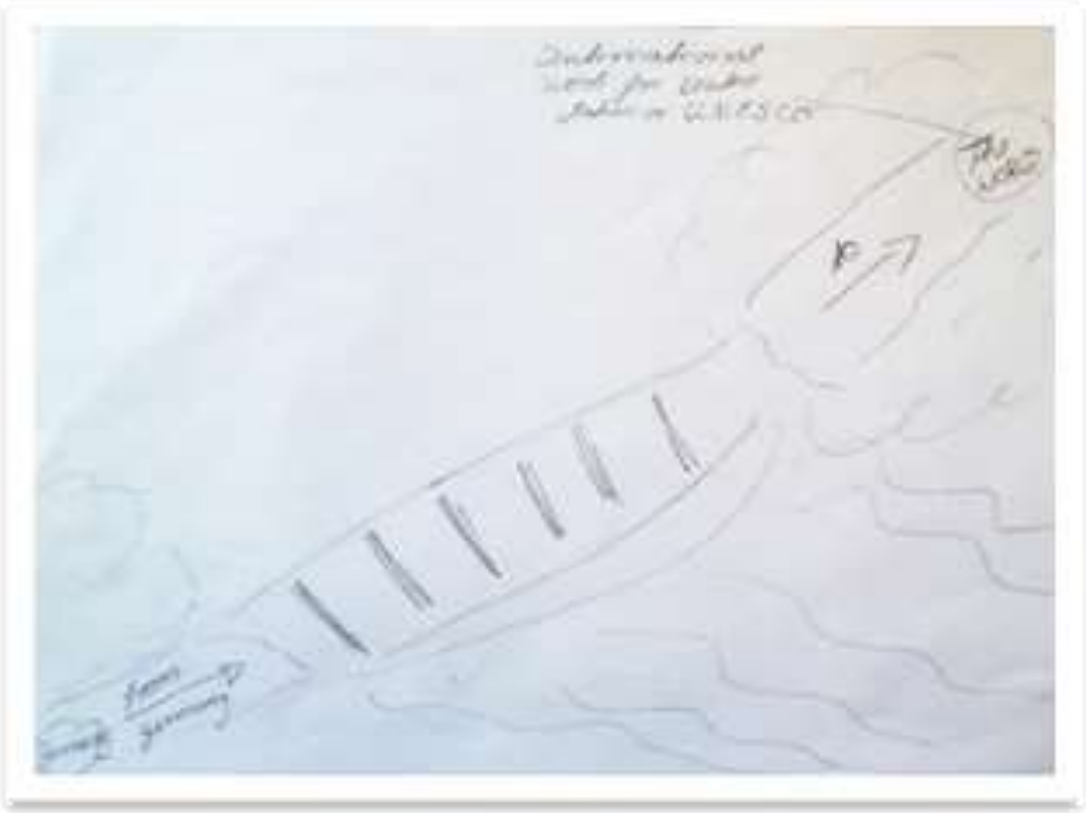


Figure 10. Path to career.

Path to symbolic/spiritual. Figure 11 was created by a 48-year old Caucasian/British male student studying in Britain. He sketched a bridge connecting hell to a path to heaven.

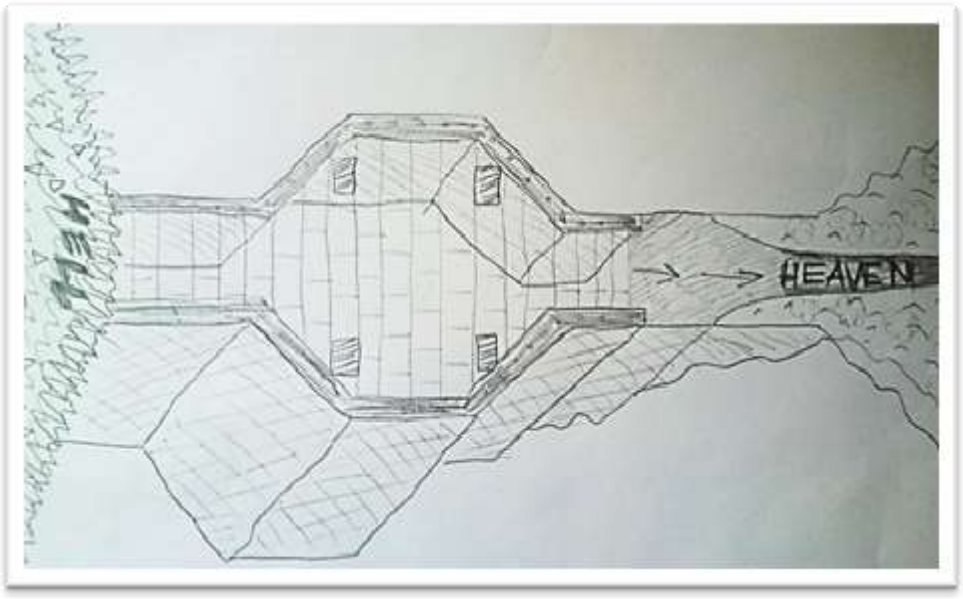


Figure 11. Spiritual path.

Path to acceptance. Figure 12 was illustrated by a 28-year-old Caucasian/Scottish female student studying in Canada. She drew a unique "inner peace bridge" fixed to land and linked to a right-future quadrant path leading to "acceptance, self-love, forgiveness, empathy and trust."

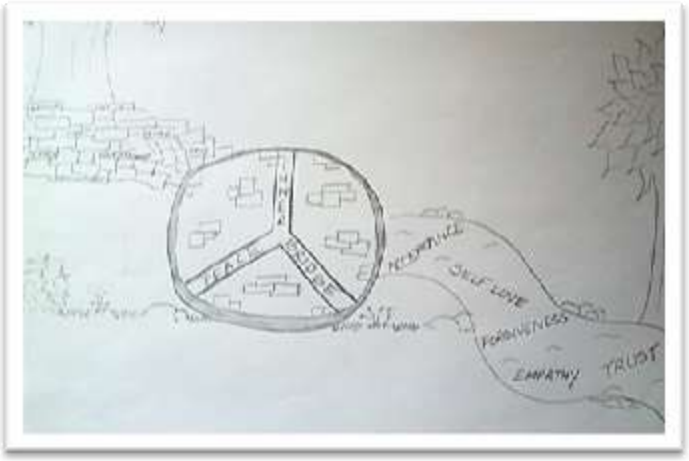


Figure 12. Path to acceptance.

Path to unknown/somewhere. Figure 13 was created by a 35-year old Caucasian/British female student studying in Britain. She drew a bridge connected to a path leading to the "unknown."

Figure 13. Path to unknown.

CHAPTER 5

Discussion

The primary research question for the study was to explore if a psychometric association could be found between the BDP scores, specifically, written associations and right-future image directionality and scores on the ASHS (Snyder et al., 1996) and MLQ (Steger et al., 2006).
In this study, no association was found between BDP written associations and total ASHS scores. No association was found between BDP right-future image directionality scores and total ASHS scores. These findings are similar to Campbell's (2012) study findings that no association exists between BD image variable right-future directionality and hope levels. No association was found between BDP image variable right-future directionality scores and MLQ - presence of meaning scores.

However, a significant association was found between BDP written association scores and MLQ – presence of meaning scores. Participants who scored high on MLQ – presence of meaning generated more sources of life meaning paths in their BDP images leading to home, relationships, careers, education and spirituality than participants who scored low on MLQ - presence of meaning. Based on a thematic analysis of written associations, the 10 most frequent sources of life meaning themes in descending order were path leading to unknown/somewhere (16%), home (14%), nature (9%), career (7%), spirituality (7%), family/friends (4%), future (4%), city/country (4%), opportunities (4%), and education (2%). Eight less frequent sources of life meaning themes in descending order were path leading to life (7%), success (7%), self (7%), acceptance (4%), art studio (4%), wider path (4%), world (4%) and journey (2%). A number of the above sources of life themes were also generated by Darewych's (2013) institutionalized orphans BDP study participants and Steger et al.'s (2013) photographic method meaning study

participants. Path themes of home, career, spirituality and family/friends support Damon's survey study (2009) which found the above life elements are primary sources individuals use to find meaning in their lives. Specifically, the path theme of family/friends supports Frankl's (2006) theory and other sources of meaning studies (eg. Bar-tur, Savaya & Prager, 2001; Damon, 2009; Ebersole and Devogler, 1981; Emmons, 2003, Steger et al., 2013) that relationships are a primary pathway and source for individuals to find meaning in life. The path theme of unknown/somewhere supports Damon's (2009) idea that a number of today's young adults living in industrial nations lack life meaning and are suffering from "directionless drift" and "developmental paralysis." The path theme of spirituality promotes previous literature accentuating that meaning in life is positively correlated with spirituality (Steger & Frazier, 2005, Wong, 1998b) and was a common theme with the older participants. The path theme of a wider path emphasizes the importance of individuals widening their future life paths (Butler, 2010). The path of acceptance was expressed by high hope participants searching for meaning supporting Damon's (2009) idea that emotional support from significant others helps individuals move towards positive life directions. The data also support previous research demonstrating that individual's with higher levels of meaning report more future pathways (Steger, Kashdan, Sulliven, & Lorentz, 2008),

In regards to specific MLQ results, less than half of the higher education students in this study scored high on presence of and search for meaning justifying Damon's (2009) call for guiding high-school and higher education students towards future meaningful, long-term and goal-directed life paths.

In examining specific BDP inter-rater agreement scores, almost perfect agreement was obtained for image variables axis of paper and placement of self. Moderate agreement was

obtained for image variable image directionality. Similar to Darewych's (2013) and Teneckeye et al's (2009) study, sufficient agreement was not obtained for image variable bridge connection. Thus, further modifications of the BDP image variables directionality and bridge connection rating subscales is required in order to strengthen rater agreement for these two subscale rating elements.

All participants depicted a path as directed in their BDP image. Three quarters of the participants (75%) depicted a path in the right-future quadrant and more than half (64%) of the drawings exhibited flow in the direction of the right-future quadrant. The left to right-future directionality findings are comparable to Campbell's (2012) higher education student sample age 18 and over and Teneckeye et al.'s (2009) image directionality findings by the mental health professional sample age 18 to 56. Similar to Darewych's (2013) orphan sample, participants in this study as well depicted future paths in the left quadrant of their drawings. Such findings challenge the significance of left to right directionality and Bach's (1990) left-past and right-future quadrant theory.

The BDP image variable bridge type findings support previous art therapy studies (Darewych, 2013; Hays & Lyons, 1981) that female participants are more likely to draw bottom arched bridges. Additionally, the BDP axis of paper image variable findings support Darewych's (2013), Heo and Jue's (2012) and Hays and Lyons' (1981) study conclusions that horizontal placement of paper is a preference for BD's. One interesting BDP finding was that BDP drawings with city, country, continent or spiritual themes depicted floating bridges. Such BDP images with city, country, continent or spiritual landscapes may be viewed as imaginative images (Yedida & Itzhaky, 2004) for no physical earthly bridges connect continents or heaven to hell. Interestingly, participants who drew floating bridges connecting counties, continents or

heaven and hell scored moderate to high on state hope. Such findings refute Hays and Lyons (1981) notion that insecure bridge attachments may indicate hopelessness in individuals.

Limitations of the Study

One limitation of the present study was the composition of the sample. Similar to Campbell's (2012) study, the majority of the higher education students were women. This was due to the nature of the student sample. In Britain and Canada, higher education students enrolled in art therapy and psychology courses are largely women. Due to the high percentage of female participants, this study was not able to explore possible gender differences in meaningful pathways, meaning in life and hope scores. A second limitation of the study was the small sample size. The BDP is a one-drawing measure which can be completed in one art therapy session. The one time administration is useful for art therapists conducting global outreach brief art therapy sessions. However, this strength can also be viewed as a limitation since only minimal information regarding a client's development and perception of transition can be obtained from one drawing (Teneycke, Hoshino, & Sharpe, 2009).

Conclusion

Humans at multiple junctures along their life path search for meaning. Finding meaning in life in the current world is a challenge; especially for youth and young adults (Damon, 2009; Hoffmann, 2009). Damon (2009) exclaimed that a number of today's youth and young adults living in industrial nations lack life meaning and are suffering from "directionless drift" and "developmental paralysis." The achromatic BDP art-based assessment summons an individual to visualize, draw and clarify a bridge that links their past and present life to a path which travels towards sources of life meaning and goal-directed avenues. The BDP explicitly requests individuals to write on the paper the story or meaning attached to their BDP drawing. The BDP

art-based drawing encouraged participants in this study to explore their sources of life meaning and life goals.

In this study, BDP written associations revealed the participants' goals and sources of meaning in life (i.e., home, family, friends, present and future careers and education). Results indicated a significant association between BDP written associations and MLQ-presence of meaning. Based on the results of the study, the BDP art-based assessment complements the MLQ (Steger et al., 2006). Collectively these two measures in clinical and research sessions can assess a client's presence of life meaning, sources of life meaning and goal-related pursuits.

In the therapeutic setting, the BDP allows the therapist to examine if the client's depicted life goal is realistic and attainable. If realistic, the therapist can then discuss with the client life obstacles which are prohibiting them from reaching their goals as well as knowledge and skills necessary to achieve their directional goal. If the client's goal seems unrealistic then the therapist can direct the client to identify and draw an alternative path towards a more attainable, positive and meaningful goal. Metaphorically, the BDP allows the therapist to determine if the client is feeling stuck in an "existential vacuum" (Frankl, 2006), standing in the middle of a bridge unable to move in any direction towards aspirations. Should the client's path seem toxic or appear to be meandering towards a dead-end, crossroad or the unknown then the therapist can encourage the client to explore other positive pathways which will once again trigger movement, "flow" (Csikszentmihalyi, 1991) and change their life journey.

The written associations generated by the higher education students in this study underscored their needs for remaining connected with family and friends while pursuing their academic pursuits, establishing new relationships, widening their life paths, expanding their

sources of meaning in life and being encircled by individuals who accept them for who they are and their chosen academic and career paths.

Additionally, it is recommended that art-based assessments include written associations for thematic content and correlational analysis with self-report measures.

In clinical sessions, when utilizing the BDP as an intervention, the researcher recommends that therapists allow clients to use chromatic materials such as paints, pastels and oil crayons and a larger sheet of white paper such as 12" x 18" in. A large size of paper provides the client more space on which to write the meaning, story and narrative attached to the image. Therapists may also direct clients to create a three-dimensional, free-standing BDP with clay, plasticine and/or recycled materials. Furthermore, the researcher recommends integrating the BDP in digital art therapy sessions. In the digital art therapy session, the art therapist can direct a client to draw the BDP on the ipad or Windows 8 touch screen.

Future directions for research

It is the researcher's hope that the present study's multifaceted theoretical framework will strengthen the "bridge connection" between art therapy, meaning therapy and positive psychology. The study included the creation of a pencil-and-paper BDP Manual and scoring system to be used by future art therapists, meaning therapists, positive psychologists and other mental health professionals. The researcher is currently developing a computerized BDP assessment which will enable future BDP image raters to analyze the drawings using technology. Future research could introduce the BDP with the MLQ (Steger et al., 2006) or with the MLQ-Short Form (Steger & Samman, 2012). The researcher may re-introduce the BDP to institutionalized orphans but this time with the new MLQ Ukrainian version which was translated by the researcher. Second, in this study, the BDP art-based assessment was introduced

first and may have influenced participants' meaning in life scores on the MLQ. Thus, future research could counterbalance introducing the measures. Third, since the written associations attached to the BDP images provided a range of content regarding participants sources of life meaning and goals, future BDP qualitative studies with same and other diverse populations may utilize qualitative data analysis software such as Atlas ti or NVivo, to explore in greater depth participant-generated themes and categories. Future BDP qualitative studies concentrating on written associations attached to the image may direct participants to draw their BDP with chromatic materials such as thin-tipped watercolour markers, oil crayons and/or pastels. And fourth, future BDP studies are recommended with older adults commencing their journey from life to the unknown. For as Nucho (1990) wrote "We have to build our own bridges constantly over physical obstacles, social obstacles, and over our individual psychological obstructions. Life itself is a never ending process of building bridges and of getting ready to cross the final bridge from this life to whatever comes next" (p.39).

APPENDIX A

LESLEY IRB STUDY APPROVAL

Institutional Review Board

29 Everett Street

Cambridge, MA 02138

Tel 617-349-8234

Fax 617-349-8190

irb@lesley.edu

September, 8th, 2012

To: **Olena Darewych**

From: Robyn Cruz and Terrence Keeney, Co-chairs, Lesley IRB

RE: Application for IRB Review: ***The Bridge Drawing with Path: Expanding Art-Based Instruments in Art Therapy***

IRB Number: 11-039

This memo is written on behalf of the Lesley University IRB to inform you that your application for approval has been granted following a review by the full board. Your project poses no more than minimal risk to participants.

If at any point you decide to amend your project, e.g., modification in design or in the selection of subjects, you will need to file an amendment with the IRB and suspend further data collection until approval is renewed.

If you experience any unexpected "adverse events" during your project you must inform the IRB as soon as possible, and suspend the project until the matter is resolved.

Date of IRB Approval: September 5th, 2012

APPENDIX B

BDP STUDY INFORMATION AND CONSENT FORM

Art Therapy Bridge Drawing with Path (BDP) Study

Information and Informed Consent Form for X College/University Students

Principal Investigator: Olena Darewych, oledarewych@rogers.com, 647-889-7753

You are being asked to volunteer in this study to assist in my doctoral research on the Bridge Drawing with Path art-based instrument. The purpose of the study is to explore how college students visualize and draw their life and goals.

First, you will read and complete this information and informed consent form. Then you will be directed to complete a Bridge Drawing with Path in 10 minutes. No artistic experience required. Finally, you will be requested to complete a Hope and a Meaning in Life self-report questionnaire. Each questionnaire will take 5 minutes to complete. Overall, the one-time study session will take no more than 30 minutes.

This research project is anticipated to be completed by approximately May 2013.

I, _____, consent to participate in the one-time art therapy Bridge Drawing with Path study session.

I understand that:

- I am volunteering for an art therapy study involving the Bridge Drawing with Path art-based instrument.
- My identity will be protected.
- My drawing and two self-report questionnaires will be kept confidential and used anonymously only for purposes of presentation and/or publication.
- The drawing and questionnaires may bring up feelings, thoughts, memories, and physical sensations. Therefore, possible emotional reactions are to be expected, however, I am free to end the session at any time. If I find that I feel stress, I will be provided with resources and referrals to assist me, and will not lose any benefits that I might otherwise gain by staying in the study.
- This study will not necessarily provide any benefits to me. However, I may experience increased self-awareness and other personal insights regarding my present and future life goals. The results of the study may also help to increase public and professional awareness of the needs and experiences of high school, college and university students.

- My drawing and self-report questionnaires will be kept in a locked filing cabinet in the investigator's possession. This information will not be used in any future study without my written consent.

- The therapist is ethically bound to report, to the appropriate party, any criminal intent or potential harm to self.

- I may choose to withdraw from the study at any time and can ask to have my drawing and self-report questionnaires removed from the data set after data collection.

Confidentiality, Privacy and Anonymity:

You have the right to remain anonymous. If you elect to remain anonymous, the researcher will keep your records private and confidential to the extent allowed by law. Pseudonym identifiers rather than your name will be used on study records. Your name and other facts that might identify you will not appear when study results presented or published. The researcher will provide you with a copy of this consent form to keep.

a) **Researcher's Signature**:

_____ _____ _____

Date Researcher's Signature Name

b) **Participant's Signature**:

I am 18 years of age or older. The nature and purpose of this research have been satisfactorily explained to me and I agree to become a participant in the study as described above. I understand that I am free to discontinue participation at any time if I choose, and that there researcher will gladly answer any questions that arise during the course of the research.

_____ _____ _____

Date Participant's Signature Print Name

There is a Standing Committee for Human Subjects in Research at Lesley University to which complaints or problems concerning any research project may, and should, be reported if they arise. Contact the Dean of Faculty or the Committee at Lesley University, 29 Everett Street, Cambridge Massachusetts, 02138, telephone: (617) 349-8517.

APPENDIX C

BDP STUDENT INFORMATION SHEET

Art Therapy Bridge Drawing with Path (BDP) Study

Information Sheet for X College/University Students

Dear **X** Students,

I am currently a Lesley University Expressive Therapies PhD student and inviting TATI students 18 years of age or older to volunteer in my doctoral research. The title of the quantitative study is "*The Bridge Drawing with Path: Expanding Art-Based Instruments in Art Therapy*." The purpose of the study is to explore how college and university level students visualize and draw their life and goals.

Participants will attend a one-time group study session which will take no more than 30 minutes and will be conducted at X at an arranged time during the 2013 winter semester. The one-time group study session will be facilitated by the research assistant who is an art therapist. During the one-time study session, participants will first read and complete the information/informed consent form and demographic form. Then participants will be directed to complete the 'Bridge Drawing with Path' art exercise in 10 minutes. No artistic experience required. Finally, participants will be requested to complete a Hope and a Meaning in Life self-report questionnaire. Each questionnaire will take 5 minutes to complete.

For this study, your identity will be protected. Your drawing and two self-report questionnaires will be kept confidential and used anonymously only for purposes of presentation and/or publication. You may choose to withdraw from the study at any time and can ask to have your drawing and self-report questionnaires removed from the data set after data collection.

This study will not necessarily provide any benefits to participants. However, participants may experience increased self-awareness and other personal insights regarding their present and future life and goals. The results of the study may also help to increase public and professional awareness of the needs and experiences of college and university level students.

If you are interested in taking part in this study or would like to obtain further study information please feel free to contact me, Olena Darewych, via email at oledarewych@rogers.com or by phone at 647-889-7753. Students who participate may enter a prize draw for multiple Chapters Book cards.

Thank-you for taking the time to read the BDP study information sheet.

Warmly,

Olena Darewych, MA, RCAT
Doctoral Student in Expressive Therapies,
Lesley University, Cambridge, MA USA

APPENDIX D

BDP STUDY RECRUITMENT AND INFORMATION FLYER

Participate in a Research Study

A researcher at Lesley University invites X students 18 years of age or older to participate in an art therapy research study

The purpose of the study is to determine students' capacity to draw and perceive their life and goals.

Participants will complete a Bridge Drawing with Path and two self-report questionnaires. No artistic experience required. The one-time session will take no more than 30 minutes.

Your information is kept confidential.

One-time study sessions: xxxxxxxxxxxxx

Students who participate may enter a prize draw for Chapter's book cards.

For more information, please email oledarewych@rogers.com
or call 647-889-7753

APPENDIX E

BDP PARTICIPANT DEMOGRAPHIC INFORMATION FORM

Bridge Drawing with Path Study

Participant Demographic Information Form

ID#: _____

Are you male or female?

Male Female

1. What is your age?

2. Are you right-handed, left-handed or ambidextrous?

3. Current education level/grade?

4. What is your ethnicity?

5. If international student, country of origin?

APPENDIX F

MEANING IN LIFE QUESTIONNAIRE

MLQ

Please take a moment to think about what makes your life and existence feel important and significant to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below:

Absolutely Untrue	**Mostly Untrue**	**Somewhat Untrue**	**Can't Say True or False**	**Somewhat True**	**Mostly True**	**Absolutely True**
1	**2**	**3**	**4**	**5**	**6**	**7**

1. I understand my life's meaning.
2. I am looking for something that makes my life feel meaningful.
3. I am always looking to find my life's purpose.
4. My life has a clear sense of purpose.
5. I have a good sense of what makes my life meaningful.
6. I have discovered a satisfying life purpose.
7. I am always searching for something that makes my life feel significant.
8. I am seeking a purpose or mission for my life.
9. My life has no clear purpose.
10. I am searching for meaning in my life.

MLQ syntax to create Presence and Search subscales:
Presence = 1, 4, 5, 6, & 9-reverse-coded
Search = 2, 3, 7, 8, & 10

Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The Meaning in Life Questionnaire: Assessing the presence of and search for meaning in life. Journal of Counseling Psychology.

APPENDIX G

ADULT STATE HOPE SCALE

State Hope Scale (Goals Scale for the Present)

Directions: Read each item carefully. Using the scale shown below, please select the number that best describes how you think about yourself right now and put that number in the blank before each sentence. Please take a few moments to focus on yourself and what is going on in your life at this moment. Once you have this "here and now" set, go ahead and answer each item according to the following scale:

1 = Definitely False
2 = Mostly False
3 = Somewhat False
4 = Slightly False
5 = Slightly True
6 = Somewhat True
7 = Mostly True
8 = Definitely True

_____ 1. If I should find myself in a jam, I could think of many ways to get out of it.
_____ 2. At the present time, I am energetically pursuing my goals.
_____ 3. There are lots of ways around any problem that I am facing now.
_____ 4. Right now, I see myself as being pretty successful.
_____ 5. I can think of many ways to reach my current goals.
_____ 6. At this time, I am meeting the goals that I have set for myself.

Notes: The Agency subscale score is derived by summing the three even-numbered items; the Pathways subscale score is derived by adding the three odd-numbered items. The total State Hope Scale score is derived by summing the three Agency and the three Pathways items. Scores can range from a low of 6 to a high of 48. When administering the State Hope Scale, it is labeled as the "Goals Scale For the Present."

Taken from Snyder, C. R.., Sympson, S. C., Ybasco, F. C., Borders, T. F., Babyak, M. A., & Higgins, R. L. (1996). Development and validation of the State Hope Scale. *Journal of Personality and Social Psychology, 2*, 321-335. The scale can be used for research purposes without contacting the author.

APPENDIX H

BDP IMAGE RATER CONFIDENTIALITY FORM

Rater #X

Confidentiality Form

I, _____, as Rater #X for the Bridge Drawing with Path quantitative study being conducted by Olena Darewych; Expressive therapies PhD student at Lesley University, understand that the images I am assessing are confidential. I will not share the images or the coded data with another party. Upon completion of the coding and inputting of data in the provided excel rating spreadsheet, I will return the completed excel document to the primary research investigator and will then delete the excel document from my computer.

Rater #X Name: _____

Rater #X Signature: _____

Date: _____

Witness: _____
(Primary Investigator)

APPENDIX I

RATER RECEIPT OF FUNDS

Rater #X

Receipt of Funds

I, _____ received $ 1**00** as Rater #X for coding and inputting image characteristics within an excel rating spreadsheet for the Bridge Drawing with Path quantitative study being conducted by Expressive Therapies PhD student Olena Darewych at Lesley University.

Rater #X Name: _____

Rater #X Signature: _____

Date: _____

Witness: _____
(Primary Investigator)

APPENDIX J

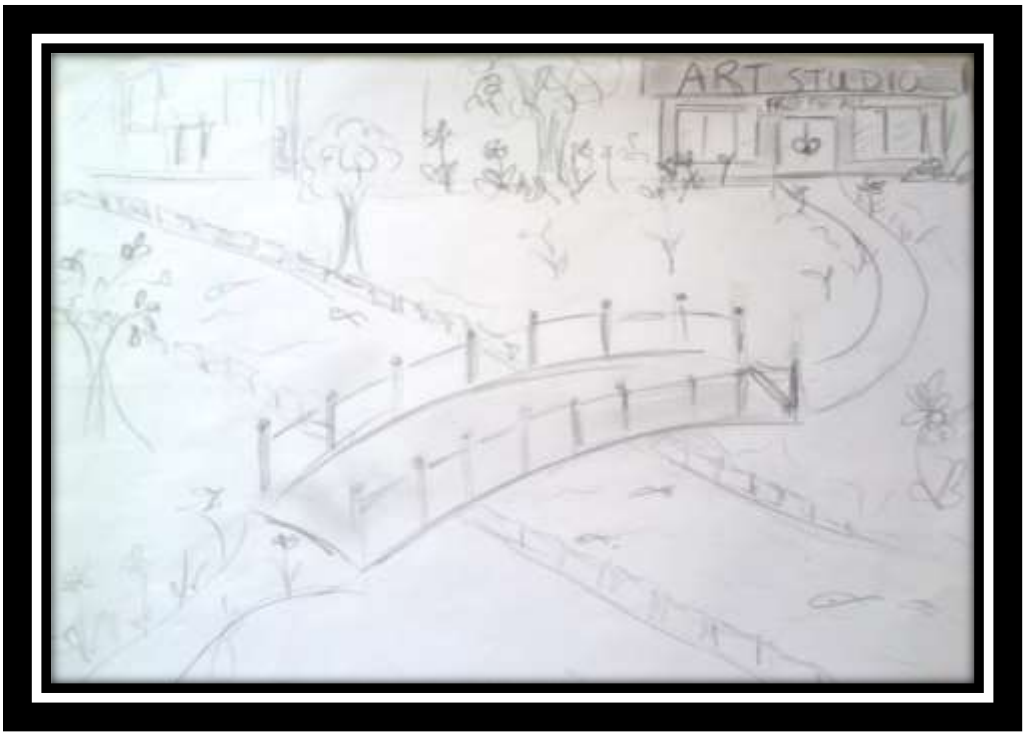
BDP MANUAL

The pencil-and-paper **Bridge Drawing with Path** (BDP) Rating Manual

January 2013

Olena Darewych, MA RCAT

Based on Hays and Lyons (1981) Bridge Drawing projective drawing instrument



Bridge Drawing with Path Information

The pencil-and-paper Bridge Drawing with Path art-based assessment is based on the Bridge Drawing (BD) art-based instrument which was designed by American art therapists Ronald Hays and Sherry Lyons (1981) in order to determine how a normal American population of latency age children and adolescents undergoing difficult developmental changes would draw a bridge from one place to another. Similar to the BD, the BDP is a one-drawing measure which can be used as an assessment and as an intervention. The Bridge Drawing with Path (BDP: Darewych, 2013) monochrome art-based instrument includes two universal metaphors that of a bridge and a path. The BDP rating scale includes seven of Hays and Lyons (1981) Bridge Drawing image variables: (1) Axis of Paper, (2) Image Directionality, (3) Bridge Attachments, (4) Type of Bridge, (5) Matter under the Bridge, (6) Placement of Self in Picture, and (7) Written Association as well as two path related image variables: (1) Path Quadrant and (2) Right Path Rotation. The current BDP rating scale may undergo future revisions.

BDP Directive in Research and Clinical Sessions

Participants are given a No. 2 lead pencil and a sheet of 8½" x 11" white paper and directed to "Draw a bridge from someplace to someplace. The bridge connects to a path. Draw the path and write where the path leads you to."

BDP Rater Information

As a BDP image rater, you will be rating monochrome BDP images drawn with a No.2 lead pencil on a sheet of 8½"x 11" white paper. As an image rater, you are being asked to rate all nine BDP image variables. To simplify the rating process, first rate image characteristics #1 for all drawings. For example, if there are 50 target drawings, rate image characteristic #1 for all 50 drawings first. When complete, move on to rating image variable two for all 50 drawings and so forth. To minimize rater fatigue, conduct multiple rating sessions. If you are rating 50 drawings, rate image variables one, two and three. Then take a break.

Input data coding in the BDP excel spreadsheet provided for you (see page 12). You can input the codes directly into emailed attached excel spreadsheet or input the codes on the hard copy sheet and then transfer the codes into the computer sheet.

Image variable one - axis of the paper

Indicate the axis of the paper:

Code	
0	For image drawn along horizontal axis
1	For image drawn along vertical axis
2	For image drawn along both axis; undefined

Axis of paper examples:

Horizontal Axis

Vertical Axis

Image variable two – image directionality

Indicate the direction, movement or flow within the whole image:

Code	
0	For movement from left to right
1	For movement from right to left
2	For movement upwards - primarily vertical axis
3	For movement downwards - primarily vertical axis
4	For no movement; centralized; opposite movement at both ends

Image directionality examples:

Left to Right Movement

Right to Left Movement

Centralized- No movement

Upward Movement

Downward Movement

Image variable three - path quadrant

Indicate if the ***path drawn with written association*** is located in the left quadrant; right quadrant; or omitted (no path with written association):

Code	
0	If path with written association in left quadrant
1	If path with written association in right quadrant
2	If path with written association drawn in centre
3	If path omitted from drawing
4	If paths in left and right quadrant

Path quadrant examples:

Left quadrant

Right quadrant

Centre

L/R paths

Image variable four - right path rotation

Indicate if path in the right quadrant rotates towards left crossing mid paper axis:

Code	
0	For no change of right path direction or no right path
1	For rotation of right path towards left quadrant crossing mid paper axis

Right path rotation examples:

Rotation of right path towards/into left quadrant

Image variable five - p**lacement of self in the drawing**

Indicate if person depicts self in drawing.

Code	
0	For no self
1	If depicts self in drawing

Placement of self in drawing examples:

Self

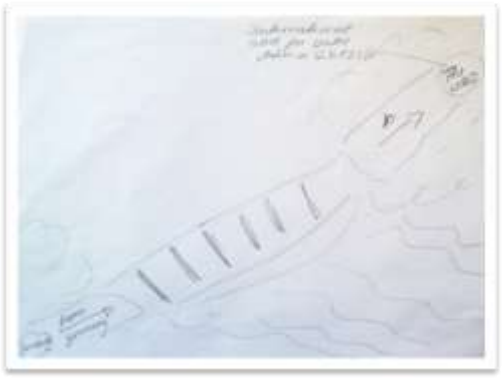
No self

Image variable six – bridge attachment

Indicate if bridge attached to land mass on both sides or is floating; disconnected to land mass:

Code	
0	If bridge floating; not attached to land mass
1	If bridge attached to land mass on both sides
2	If bridge omitted from drawing

Bridge attachment examples:



Bridge floating

Bridge attached

Image variable seven – bridge type
Indicate the type of bridge depicted; bottom arched bridge or non-bottom arched bridge

Code	
0	For linear; non-bottom arched bridge
1	For bottom-arched bridge
2	If bridge omitted from drawing

Bridge type examples:

Non-bottom arched

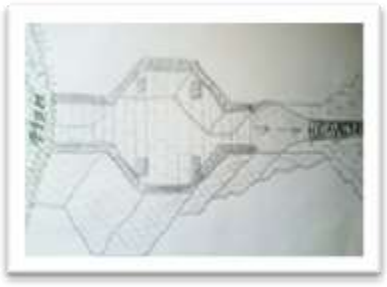
Bottom arched

Image variable eight – matter under bridge

Indicate the matter drawn under the bridge:

Code	
0	For no matter under bridge
1	For water – H2O under bridge
2	For land and/or land objects (rocks, grass, flowers) under bridge

Matter under bridge examples:



No matter example

Water example

Land example

Image variable nine – written associations

Indicate the key word written on the path or near the path or on the back of the image. For a written association with multiple words or phrases, determine and code the key word. Insert secondary words in the 'secondary written association' column located on the excel coding sheet. Example 1: "*This path leads to the **future**…peace, satisfaction, smiles, understanding, even more insight, freedom, accomplishment of difficult tasks.*" In this example, the key word **future** is present. Thus, one would code 6 for image characteristic #9 and code 10 (other comments) under the 'secondary written association' column. Example 2: "*My path to autonomy and complete self-reliance…a path **home.***" In this example, the key word home is present. Thus, code 0 for image characteristic #9 and code 10 (other comments) under the 'secondary written association' column.

Code	
0	Home
1	Family and Friends
2	Nature
3	City/Country
4	Education
5	Career
6	Future
7	Symbolic; heaven-hell, God, fantasy, spiritual
8	Opportunities
9	Unknown/somewhere
10	Other comments
11	No comment

Written Association options: better life

For rating purposes, chose one predominate/key word

The Bridge Drawing with Path (BDP) Quick Rating Sheet
(Revised 2013)
Based on Hays & Lyons (1981) BD
Olena Darewych, MA, RCAT

Image Characteristics/Variables:

1. **Axis of the paper**: Indicate the axis of the paper.
   Code 0 for horizontal axis
   Code 1 for vertical axis
   Code 2 for undefined

2. **Directionality**: Indicate the direction of the image as a whole.
   Code 0 for direction from Left to Right
   Code 1 for direction from Right to Left
   Code 2 for upward direction (primarily for vertical axis)
   Code 3 for downward direction (primarily for vertical axis)
   Code 4 undefined; no movement left or right; centralized

3. **Path quadrant**: Indicate if the ***path drawn with written association*** is located in the left quadrant; right quadrant; or omitted
   Code 0 if path in the left quadrant
   Code 1 if path drawn in the right
   Code 2 if path drawn in the centre
   Code 3 if path omitted
   Code 4 if left and right paths

4. **Right path rotation**: Indicate if path in the right quadrant rotates towards left quadrant
   Code 0 for no change of direction
   Code 1 rotation of path towards left

5. **Placement of Self in the picture**: Indicate if person depicts self in picture.
   Code 0 no self
   Code 1 depicts self in picture

6. **Bridge connection**: Indicate if bridge floating or attached to land mass.
   Code 0 if bridge floating; not attached to land mass
   Code 1 if bridge attached to land mass
   Code 2 if bridge omitted

7. **Bridge type**: Indicate the type of bridge depicted, e.g., arch or non-arch
   Code 0 for non-arch type bridge
   Code 1 for arch type bridge
   Code2 if bridge omitted

8. **Matter drawn under bridge**: Indicate the matter drawn under bridge.
   Code 0 for none
   Code 1 for water – H20
   Code 2 for land

9. **Written associations to the drawing**: Indicate the words, phrases, places, and themes written on the path/picture.
   Code 0 for home
   Code 1 for family/friends
   Code 2 for nature/forest
   Code 3 for city/country
   Code 4 for career
   Code 5 for academic/education
   Code 6 for future
   Code 7 for symbolic e.g., e.g., Heaven-Hell; to God; civilized-uncivilized; reality-fantasy.
   Code 8 opportunities
   Code 9 unknown/somewhere
   Code 10 other
   Code 11 no comment/none

BDP Spreadsheet Example

DATA SET FOR BDP: Rater X

ID	**Axis of Paper** Horizontal=0 Vertical = 1 undefined=2	**ImageDirectionality** L»R=0, R»L=1 no direction/central=2 upwards=3, downwards=4	**Path rotation** No=0, Yes=1	**Placement of Self** No=0, Yes=1	**Bridge connection** No/Floating bridge = 0 Connected to land = 1 Bridge omitted=2
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

ID	**Bridge connection** No/Floating bridge = 0 Connected to land = 1 Bridge omitted=2	**Bridge type** non-arch=0 bottom arched=1 omitted=2	**Matter under bridge** non=0 H2O=1 land=2	**Written association** home=0 family or friends=1 nature/forest=2 etc
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

REFERENCES

Akeret, R.U. (1973). *Photoanalysis*. New York: Peter H. Wyden, Inc.

Alfonso, G.A., & Byers, J.G. (2012). Art therapy and disaster relief in the Philippines. In D. Kalmanowitz, J.S. Potash, & S.M. Chan (Eds.), *Art therapy in Asia: To the bone or wrapped in silk* (pp.267-281). London, UK: Jessica Kingsley Publishers.

Allen, P. (2005). *Art is a spiritual path*. Boston, MA: Shambala Publication Inc.

Alyami, A. (2009). The integration of art therapy into physical rehabilitation in a Saudi hospital. *The Arts in Psychotherapy*, *36*, 282-288.

American Art Therapy Association (2011). *About Art Therapy*. Retrieved from http://www.arttherapy.org/aata-aboutarttherapy.html

Arrington, D. B. (2001). *Home is where the art is: An art therapy approach to family therapy*. Springfield, Illinois: Charles C Thomas Ltd.

Arrington, D. (2005). Global art therapy training – now and before. *The Arts in Psychotherapy, 32*, 193-203. doi:10.1016/j.aip.2005.03.006

Bar-Tur, L., Savaya, R., & Prager, E. (2001). Sources of meaning in life for young and old Israeli Jews and Arabs. *Journal of Aging Studies, 15*, 253-269.

Battista, J. & Almond, R. (1973). The development of meaning in life. *Psychiatry, 36*, 409-427.

Baumeister, R. F. (1991). *Meanings of life*. New York, NY: Guilford Press.

Baumeister, R., & Vohs, K. (2010). The Pursuit of meaningfulness in life. In C. Snyder (Ed.), *Handbook of Positive Psychology.*(pp. 608-617). Oxford: Oxford University Press.

Betts, D. J. (2005). *A systematic analysis of art therapy assessment and rating instrument literature*. (Doctoral dissertation, Florida State University, Tallahassee, US). Published online at http://www.art-therapy.us/assessment.htm.

Betts, D. J. (2006). Art therapy assessments and rating instruments: do they measure up?, The *Arts in Psychotherapy, 33*(5), 371-472.

Betts, D. J. (2012). Positive art therapy assessment: Looking towards positive psychology for new directions in the art therapy evaluation process. In A. Gilroy, R.Tipple, & C. Brown (Eds.), *Assessment in art therapy.* (pp.203-218). New York, NY: Routledge/Taylor & Francis Group.

Borgmann, E. (2002). Art therapy with three women diagnosed with cancer. *The Arts in Psychotherapy, 29*, 245-51.

Brooke, S. (2004). *A therapist's guide to art therapy assessments: Tools of the trade.* (2nd ed). Springfield, IL: Charles C Thomas.

Buck, J. N. (1948). The H-T-P technique, a qualitative and quantitative scoring manual. *Journal of Clinical Psychology Monograph, 4*, 1-120.

Burns, R. C., & Kaufman, H. S. (1972). *Action, Styles, and Symbols in Kinetic Family Drawings (K-F-D): An interpretive manual*. New York, NY: Brunner-Routledge.

Butler, T. (2010). *Getting unstuck: A guide to discovering your next career path*. Boston, Massachusetts: Harvard Business Press.

Campbell, K. (2012). *The bridge drawing art-based art therapy assessment: A study of validity.* Unpublished dissertation, University of Montana, Missoula, Montana.

Chamberlain, K., & Zika, S. (1988). Religiosity, life meaning, and well-being. Some relationships in a sample of women. *Journal for the Scientific Study of Religion, 27*, 411-420.

Chetwynd, T. (1982). *Dictionary of symbols*. London, England: Thorsons.

Chilton, G. (2013). Art therapy and flow: A review of the literature and applications. *Art*

Therapy, *30*(2), 64-70. doi:10.1080/07421656.2013.787211

Chilton, G., & Wilkinson, R. (2009). Positive art therapy envisioning the intersection of art therapy and positive psychology. *Australia and New Zealand Journal of Art Therapy* 4(1), 27-35.

Cirlot, J.E. (1996). *Dictionary of symbols*. London, Britain: Routledge.

Cohen, B. M. (Ed.). (1986). *The Diagnostic Drawing Series Rating Guide*. Alexandria, VA: Barry Cohen.

Cooper, J.C. (1978). *An illustrated encyclopaedia of traditional symbols*. London: Thames & Hudson.

Councill, T. (2003). Medical art therapy with children. In C. Malchiodi, *Handbook of art therapy* (pp. 207-219). New York: Guildford Publications.

Cruz, R.F., & Feder, B. (2013). *Feders' the art and science of evaluation in the arts therapies: How do you know what's working?* Springfield, Illinois: Charles C Thomas.

Csikszentmihalyi, M. (1991). *Flow: The psychology of optimal experience*. New York: Harper Perennial.

Csikszentmihalyi, M. (1996). Creativity: Flow and the psychology of discovery and intervention. New York, NY: Harper Collins Publishers.

Da Silva, Prada (2006). *Logoart, searching meaning through art*. Sao Paulo: Brazil: Edicoes Inteligentes.

Damon, W. (2009). *The path to purpose: how young people find their calling in life*. New York: Free Press.

Darewych, O. (2013). Building bridges with institutionalized orphans in Ukraine: An art therapy pilot study. *The Arts in Psychotherapy*, *40*(1), 85-93. doi: 10.1016/j.aip.2012.10.1001

Debats, D. (1999). Sources of meaning: An investigation of significant commitments in life. *Journal Of Humanistic Psychology*, *39*(4), 30-57. doi:10.1177/0022167899394003

Debats, D.L., van der Lubbe, P.M., & Wezeman, F.R.A. (1993). On the psychometric properties of the Life Regard Index (LRI): A measure of meaningful life. *Personality and Individual Differences, 14,* 337-345.

De Mare, E, (1954). *The bridges of Britain*. London, UK: B.T. Balsford, Ltd.

Dorman, W. I., & Hersen, M. (2001). *Understanding psychological assessment*. New York: Kluwer Academic/Plenum Publishers.

Emmons, R. A. (2003). Personal goals, life meaning, and virtue: Wellsprings of a positive life. In C. M. Keyes, J. Haidt (Eds.) , *Flourishing: Positive psychology and the life well-lived* (pp. 105-128). Washington, DC US: American Psychological Association. doi:10.1037/10594-005

Falck, M. J., & Gibbs, R.W. (2012). Embodied motivations for metaphorical meanings. *Cognitive Linguistics, 23*(2), 251-272. doi:10.1515/cog-2012-008

Feder, B., & Feder, E. (1998). The art and science of evaluation in the arts therapies. Illinois, U.S.A: Charles C Thomas Publisher, Ltd.

Feldman, D. B., & Snyder, C. R. (2005). Hope and the meaningful life: Theoretical and empirical associations between goal-directed thinking and life meaning. *Journal Of Social And Clinical Psychology*, *24*(3), 401-421. doi:10.1521/jscp.24.3.401.65616

Fishbach, A., & Ferguson, M. J. (2007). The goal construct in social psychology. In A. W. Kruglanski, E. Higgins (Eds.) , *Social psychology: Handbook of basic principles (2nd ed.)* (pp. 490-515). New York, NY US: Guilford Press.

Fontana, D. (1994). *The secret language of symbols: A visual key to symbols and their*

meanings. San Francisco: Chronicle Books.

Frankl, V.E. (1978). *The unheard cry for meaning: Psychotherapy and humanism*. New York, NY: Touchtone Books.

Frankl, V.E. (1985). *Man's search for meaning: An introduction to logotherapy*. New York: Pocket books.

Frankl, V.E. (1986). *The doctor and the soul* (2nd ed.) New York: Random House.

Frankl, V.E. (2006). *Man's search for meaning*. Boston, MA: Beacon Press

Fredrickson, B. (2009). *Positivity*. New York, Crown Publishers.

Frisch, M. B (2006). Quality of life: Applying a life satisfaction approach to positive psychology and cognitive psychology. Hoboken, NJ: John Wiley & Sons, Inc.

Gantt, L. (2004). The case for formal art therapy assessments. *Art Therapy: Journal of the American Art Therapy Association, 21*(1), 18-29. doi.org/10.1080/07421656.2004.10129322

Gantt, L., & Tabone, C. (1998). *The Formal Elements Art Therapy Scale*: the rating manual. Morgantown, WV: Gargoyle Press.

Gelso, C. J., & Woodhouse, S. (2003). Toward a positive psychotherapy: Focus on human strengths. In W. B Walsh (Ed.), *Counseling psychology and optimal human functioning* (pp. 171-197). Mahwah, NJ: Erlbuam.

Groth-Marnat, G. (1997). *Handbook of psychological assessment* (3rd ed.). New York, NY: Wiley.

Handler, L., & Habenich, D. (1994). The kinetic family drawing technique: A review of the literature. *Journal of Personality Assessment, 62*, 3, 440-464.

Hanes, M.J. (1997). *Roads to the unconscious: A manual for understanding road drawings*.

Oklahoma, US: Wood 'N' Barnes Publishing.

Hays, R., & Lyon, S. (1981). The bridge drawing: A projective technique for assessment in art therapy. *The Arts in Psychotherapy, 8*(4), 207-217.

Heo, S.Y., & Jue, J. (2010). A study of bridge drawing assessment responses according to the suicidal ideation of adolescence. *Korean Art Therapy Association, 17*(3), 615-631.

Hocoy, D. (2002). Cross-cultural issues in art therapy. *Art Therapy, 19*(4), 141-145. doi:10.1080/07421656.2002.10129683

Hoffman, L. (2009). Gordo's ghost: An introduction to existential perspectives on myth. In L. Hoffman, M. Yang, F. J. Kaklauskas, A. Chan (Eds.) , *Existential psychology East-West* (pp. 259-274). Colorado Springs, CO: University of the Rockies Press.

Holmes, T.H., & Rahe, R.H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research*, 11, 213.

Hudson, W.W. (1982). *The clinical measurement package. A field manual*. Homewoood, Illinois: Dorsey Press.

Jung, C. (1964). *Man and his symbols*. London, UK: Aldus Books.

Kahill, S. (1984). Human figure drawing in adults: An update of the empirical evidence, 1967-1982. *Canadian Psychology/Psychologie Canadienne*, *25*, 4, 269-292.

Kaiser, D.H. (1996). Indications of attachment theory in a drawing task. *The Arts In Psychotherapy, 23*(4), 333-340.

Kapitan, L. 2010. *An introduction to art therapy research*. New York, NY: Routledge.

Kasser & Ryan (1996). Further examining the American dream. Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22,* 80-87.

Kim, S.I., Bae, J., & Lee, Y. (2007). A computer system to rate the color-related formal

elements in art therapy assessments. *The Arts In Psychotherapy*, 34, 223-237. doi:10.1016/j.aip.2007.02.002.

Klinger, E. (1998). The search from meaning in evolutionary perspective and its clinical implications. In P.T.P. Wong & P.S. Fry (Eds.), *The human quest for meaning* (pp.27-50). Mahwah, NJ: Lawrence Erlbaum Associates.

Kottner, J., Audige, L., Brorson, S., Donner, A., Gajewski, B. J., Hróbjartsson, A., Roberts, C., Shoukri, M., & Streiner, D. L. (2011). Guidelines for reporting reliability and agreement studies (GRRAS) were proposed. *International Journal Of Nursing Studies*, *48*(6), 661-671. doi:10.1016/j.ijnurstu.2011.01.016

Knoff, H.M., & Prout, H.T. (1985). The kinetic drawing system: A review and integration of the Kinetic Family and School Drawing techniques. *Psychology in the Schools*, 22, 50-59.

Kurtz, J. L., & Lyubomirsky, S. (2013). Happiness promotion: Using mindful photography to increase positive emotion and appreciation. In J. J. Froh, A. C. Parks (Eds.) , *Activities for teaching positive psychology: A guide for instructors* (pp. 133-136). Washington, DC US: American Psychological Association. doi:10.1037/14042-021

Lantz, J. (1993). Art, logotherapy, and the unconscious god. *Journal of Religion and Health, 32*(3), 179-187.

Lambert, J., & Ranger, D. (2009). L'art-thérapie et la psychologie positive: Ensemble pour favoriser le déploiement des forces de vie. *Revue Québécoise De Psychologie, 30*(3), 57-70.

Lee, S. (2013). 'Flow' in art therapy: Empowering immigrant children with adjustment difficulties. *Art Therapy, 30*(2), 56-63. doi:10.1080/07421656.2013.786978

Leontiev, D.A. (2013). Positive psychology in search for meaning: An introduction. *The Journal of Positive Psychology, 8*(6), 457-458. doi:10.1080/17439760.2013.830766

Lilienfeld, S., Wood, J., & Garb, H. (2000). The scientific status of projective techniques. *Psychological Science in the Public Interest*, *1*, 2, 27-66.

Lukas, E. (1998). The meaning of life and the goals in life for chronically ill people. In P.T.P Wong & P. S. Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical applications* (pp.307-316). Mahwah, NJ: Erlbaum.

Malchiodi, C. A. (2006). *The art therapy sourcebook*. New York: McGraw-Hill Companies.

Mascaro, N., Rosen, D. H., & Morey, L. C. (2004). The development, construct validity, and clinical utility of the spiritual meaning scale. *Personality and Individual Differences, 37*(4), 845-860. doi:10.1016/j.paid.2003.12.011

Mascaro, N., & Rosen, D. H. (2005). Existential meaning's role in the enhancement of hope and prevention of depressive symptoms. *Journal of Personality, 73*, 985-1014.

Mascaro, N., & Rosen, D. H. (2006). The role of existential meaning as a buffer against stress. *Journal of Humanistic Psychology, 46*, 168-190.

Maslow, A.H. (1970). *Motivation and personality* (2nd ed.) New York: Harper & Row.

Mattson, D.C. (2012). An introduction to the computerized assessment of art-based instruments. *Art Therapy: Journal of the American Art Therapy Association, 29*(1), 27-32. doi:10.1080/07421656.2012.648091

Mattson, D.C. (2010). Issues in computerized assessment. *The Arts in Psychotherapy*, 37, 328-334. Doi:10.1016/j.aip.2010.05.2008

McNiff, S. (2009). *Integrating the arts in therapy: History, theory and practice*. Springfield, Illinois: Charles C Thomoas, Ltd.

McNiff, S., & Barlow, G. C. (2009). Cross-Cultural Psychotherapy and Art. *Art Therapy: Journal of the American Art Therapy Association, 26*(3), 100-106.

McPhee, J. & Wegner, K. (1976). Kinetic-Family-Drawing styles and emotionally disturbed childhood behaviour, *Journal of Personality Assessment, 40*, 187-491.

Michael, S. T., & Snyder, C. R. (2005). Getting Unstuck: The Roles of Hope, Finding Meaning and Rumination in Adjustment to Bereavement among College Students. *Death Studies, 29*(5), 435-458. doi:10.1080/07481180590932544

Moon, B.L. (2007). *The role of metaphor in art therapy: Theory, method, and experience*. Springfield, Illinois: Charles C Thomas Publisher.

Moon, B. L. (2009). *Existential art therapy: The canvas mirror* (3rd. Ed). Springfield, Illinois: Charles C Thomas Publisher.

Morgan, J., & Farsides, T. (2009). Measuring meaning in life. *Journal Of Happiness Studies, 10*(2), 197-214. doi:10.1007/s10902-007-9075-0

Nan, J., & Hinz, L. D. (2012). Applying the Formal Elements Art Therapy Scale (FEATS) to adults in an Asian population. *Art Therapy, 29*(3), 127-132. doi:10.1080/07421656.2012.701602

Nucho, Aino (1990). Bridge drawings: A technique of stress management. In Jakab, I. (Ed.). *Stress management through art. Proceedings of the 1988 International Congress of Psychopathology of Expression, Boston, Massachusetts* (pp.23-38). Brookline, MA, USA: The American Society of Psychopathology of Expression.

O'Hanlon, B. (2012). *The therapist's notebook on positive psychology: Activities, exercises, and handouts*. NewYork, NY, US: Routledge/Taylor & Francis Group.

Osipow, S.H., Carney, C.G. Winer, J. Yanico, B. & Koschier, M. (1976). Career decision scale. Third revision. Lutz, FL: Psychological Assessment Resources, Inc.

Peterson, C. (2006). *A primer in positive psychology.* Oxford: Oxford University Press.

Peterson, C., & Park, N. (2012). Character strengths and the life of meaning. In P.T.P Wong (Eds.), 2nd ed. *The human quest for meaning: A handbook of psychological research and clinical applications* (pp.277-293). Mahwah, NJ: Erlbaum.

Peterson, C., & Seligman, M. (2003/4). *Character strengths and virtues: A handbook and classification.* NewYork: Oxford.

Prescott, M. V., Sekendur, B., Bailey, B., & Hoshino, J. (2008). Art making as a component and facilitator of resiliency with homeless youth. *Art Therapy, 25*(4), 156-163. doi:10.1080/07421656.2008.10129549

Puig, A., Lee, S. L., Goodwin, L., & Sherrard, P. (2006) The efficacy of creative arts therapies to enhance emotional expression, spirituality, and psychological well-being of newly diagnosed Stage I and Stage II breast cancer patients: A preliminary study. *The Arts in Psychotherapy, 33*(3), 218-228.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*(3), 385-401.

Remen, R. N. (2001). Recapturing the soul of medicine: Physicians need to reclaim meaning in their working lives. *Western Journal of Medicine, 174*(1), 4.

Rogers, C. R. (1951). *Client-centered therapy: Its current practice, implications and theory*. Boston, MA: Houghton-Mifflin.

Rose, S., Elkis-Abuhoff, D., Goldblatt, R., & Miller, E. (2012). Hope against the rain: Investigating the psychometric overlap between an objective and projective measure of

hope in a medical student sample. *The Arts In Psychotherapy*, *39*(4), 272-278. doi:10.1016/j.aip.2012.04.003

Rubin, J. A. (1999). *Art Therapy: An introduction*. Philadelphia, USA: Brunner/Mazel.

Ryff, C. D., & Singer, B. (1998). *Middle age and well-being, Encyclopedia of Mental Health. New York*: Academic Press. 707-19.

Ryff, C. D. (1989). Happiness is everything, or is it? Exploration on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*,1069-1081.

Schnell, T. (2009). The Sources of Meaning and Meaning in Life Questionnaire (SoMe): Relations to demographics and well-being. *The Journal of Positive Psychology*, *4*(6), 483-499. doi:10.1080/17439760903271074

Schnell, T. (2010). Existential indifference: Another quality of meaning in life. *Journal of Humanistic Psychology*, *50*(3), 351–373.

Seligman, M. E. (2011). *Flourish*. New York, NY: Free Press.

Seligman, M. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*(1), 5-14. doi:10.1037/0003-066X.55.1.5

Silver, R. (2002). *Three Art Assessments: The Silver Drawing Test of Cognition And Emotion; Draw a Story: Screening for Depression; and Stimulus Drawing and Techniques*. New York: Brunner-Routledge.

Snow, S., & D'Amico, M. (2009). *Assessment in the creative arts therapies: Designing and adapting assessment tools for adults with developemental disabilities*. Springfield, Illinois: Charles C Thomas.

Snyder, C.R. (1994). *The psychology of hope: You can get there from here*. New York: Free Press.

Snyder, C.R., Harris, C., Anderson, J.R., Holleran, S.A., Irving, L.M., Sigmon, S.T., et al. (1991). The will and the ways: Development and validation of an individual differences measure of hope. *Journal of Personality and Social Psychology, 60*, 570-585.

Snyder, C.R., LaPointe, A.B., Crowson, J.J., Early, S. (1998). Preferences of high- and low-hope people for self-referential input. *Journal of Cognition and Emotion, 12*(6), 807-823.

Snyder, C. R., & McCullough, M. E. (2000). A positive psychology field of dreams: 'If you build it, they will come…'. *Journal of Social And Clinical Psychology, 19*(1), 151-160. doi:10.1521/jscp.2000.19.1.151

Snyder, C. R., Shorey, H. S., Cheavens, J., Pulvers, K. M., Adams, V. H., & Wiklund, C. (2002). Hope and Academic Success in College. *Journal of Educational Psychology, 94*(4), 820-826.

Snyder, C. R., Sympson, S. C., Ybasco, F. C., Borders, T. F., Babyak, M. A., & Higgins, R. L. (1996). Development and validation of the State Hope Scale. *Journal of Personality and Social Psychology, 70*, 321–335.

Spaniol, S. (2012). Art therapy with adults with severe mental illness. In C. A. Malchiodi (Ed.), *Handbook of art therapy (2nd ed.)* (pp. 288-301). New York, NY US: Guilford Press.

Steger, M. F. (2009). Meaning in life. In S. J. Lopez (Ed.), *Oxford handbook of positive psychology* (2nd Ed.) (pp. 679-687). Oxford, UK: Oxford University Press.

Steger, M.F. (2010). The meaning in life questionnaire. What do the scores mean?

Steger, M. F. (2012). Experiencing meaning in life: Optimal functioning at the nexus of well-being, psychopathology, and spirituality. In P. T. P Wong (Eds.), 2nd ed. *The human quest for meaning: A handbook of psychological research and clinical applications* (pp. 165-184). Mahwah, NJ: Erlbaum.

Steger, M.F. & Frazier, P. (2005). Meaning in Life: One link in the chain from religion to well-being. *Journal of Counseling Psychology, 52,* 574-582.

Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The Meaning in Life Questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology, 53*(1), 80-93.

Steger, M. F., Frazier, P., & Zacchanini, J.L. (2008). Terrorism in two cultures: Traumatization and existential protective factors following the September 11th attaches and the Madrid train bombings. *Journal of Trauma and Loss, 13*, 511-527.

Steger, M. F., Kashdan, T. B., Sullivan, B. A., & Lorentz, D. (2008). Understanding the search For meaning in life. Personality, cognitive style, and the dynamic between seeking and experiencing meaning. *Journal of Personality, 76*, 199-228.

Steger, F.M., & Samman, E. (2012). Assessing meaning in life on an international scale. *International Journal of Wellbeing, 2*(3), 182-195. doi10.5502/ijw.v2.i3.2

Steger, F.M., Shim, Y., Rush, B.R., Brueske, R.A., Shin, J.Y., & Merriman, L.A. (2013). The mind's eye: A photographic method for understanding meaning in people's lives. *The Journal of Positive Psychology, 8*(6), 530-542. doi10.1080/17439760.2013.830760

Stepney, S. (2001). *Art therapy with students at risk*. Springfield, IL: Charles C Thomas.

Teneycke, T., Hoshino, J., & Sharpe, D. (2008). The bridge drawing: An exploration of psychosis. *The Arts in Psychotherapy 36*, 297-303.

Tetley, J. (2010). An investigation of self-authorship, hope, and meaning in life among second-year college students. *Dissertation Abstracts International Section A, 71*,

Wadeson, H. (2010). *Art psychotherapy (2nd ed.)*. Hoboken, NJ US: John Wiley & Sons Inc.

Weiser, J. (1993). *Phototherapy techniques: Exploring the secrets of personal snapshots and family albums*. San Francisco, CA: Jossey-Bass.

Wilkinson, R.A., & Chilton, G. (2013). Positive art therapy: Linking positive psychology to art therapy theory, practice, and research. *Art Therapy: Journal of the American Art Therapy Association,30*(1), 4-11.

Winbolt, B. (2011). *Solution focused therapy for the helping professions*. Philadelphia, PA: Jessica Kingsley.

Wong, P. P. (1998a). Implicit theories of meaningful life and the development of the personal meaning profile. In P. P. Wong, P. S. Fry (Eds.) , *The human quest for meaning: A handbook of psychological research and clinical applications* (pp. 111-140). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.

Wong, P. P. (1998b). Spirituality, meaning, and successful aging. In P. P. Wong, P. S. Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical applications* (pp. 359-394). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.

Wong, P. T. (2010). Meaning therapy: An integrative and positive existential psychotherapy. *Journal of Contemporary Psychotherapy, 40,* 85-93. doi 10.1007/s10879-009-9132-6

Wong, P. T. (2012a). A roadmap for meaning research and application. In P.T.P Wong (Eds.), 2nd ed. *The human quest for meaning: A handbook of psychological research and clinical applications* (pp.xxix-xlvi). Mahwah, NJ: Erlbaum.

Wong, P. T. (2012b). From logotherapy to meaning-centered counseling and therapy. In P.T.P Wong (Eds.), 2nd ed. *The human quest for meaning: A handbook of psychological research and clinical applications* (pp.619- 647). Mahwah, NJ: Erlbaum.

Yalom, I. D (1995). *The theory and practice of group psychotherapy*. New York: Basic Books.

Yedidia, T., & Itzhaky, H. (2004). Social work practice with children and families. In Webb, N.B., *Mass trauma and violence* (p.283-303). New York, NY, US: Guildford Press.

Zhang, S., & Xu, Y. (2011). Application of MLQ in high school students from earthquake-stricken and non-stricken area. *Chinese Journal Of Clinical Psychology*, *19*(2), 178-180.